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**Official Year Book**  
of  
**New South Wales.**

**No. 50.**

**1945-46.**

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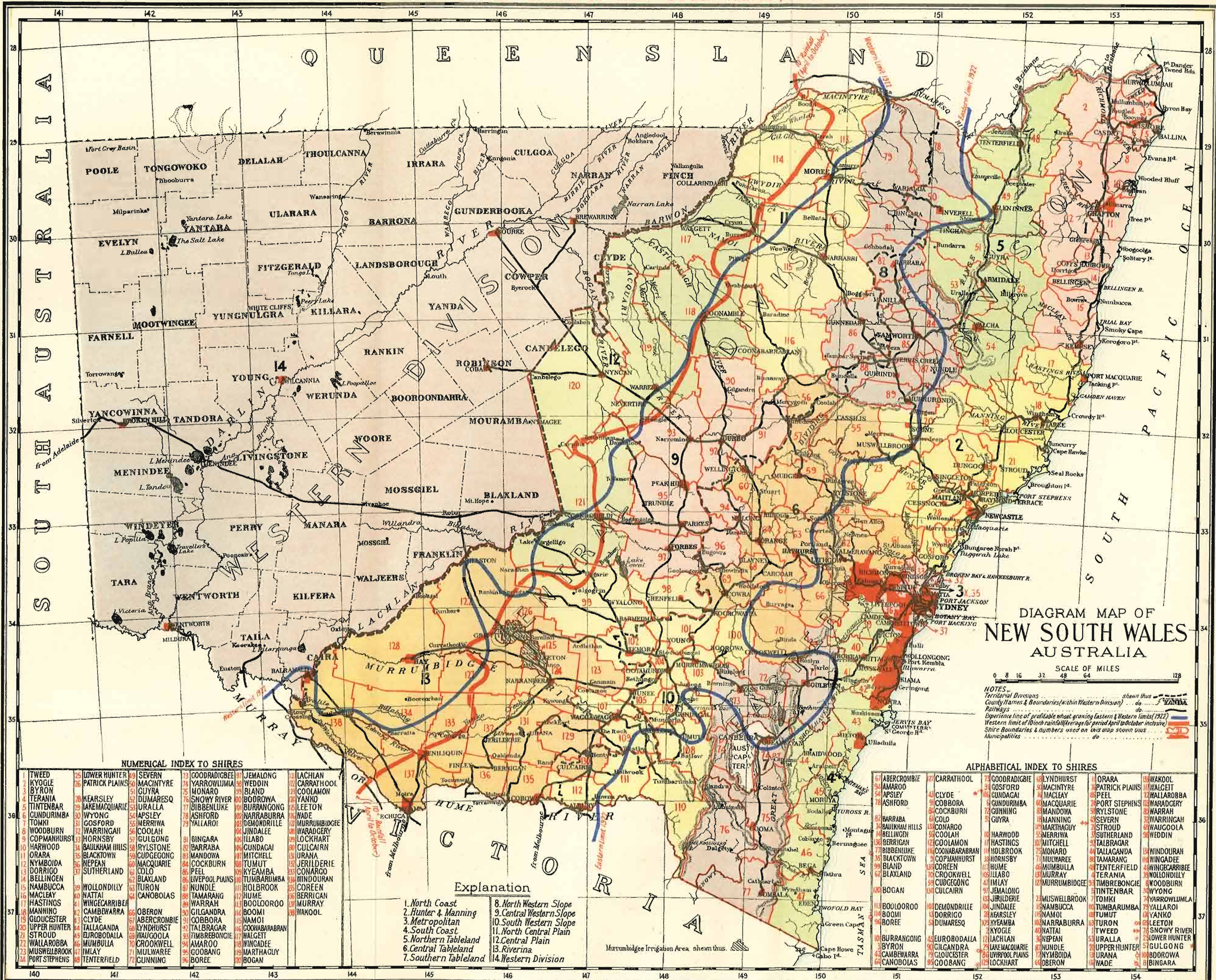
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R B D

From  
Harry Moore







THE  
OFFICIAL YEAR BOOK  
OF  
NEW SOUTH WALES.

No. 50.

1945-46.



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S. R. CARVER,  
GOVERNMENT STATISTICIAN.

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PUBLISHED BY AUTHORITY OF THE GOVERNMENT OF NEW SOUTH WALES.

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## PREFACE

**THIS** is the fiftieth issue of the Official Year Book of New South Wales, which, from the first issue in 1886 to 1904, was known as the "Wealth and Progress of New South Wales."

As with the preceding issue (1941-42 and 1942-43), there have been unavoidable delays in preparing and publishing this edition. The earlier chapters, which were published separately as soon as possible after preparation, contain statistical data relating mostly to the year 1945-46 and earlier years, with a good deal of the textual matter revised to the closing months of 1947. Later chapters include statistical details for the year 1946-47 and treat many important administrative changes of the post-war period. Chapters relating to Food, Prices, Employment, Industrial Arbitration, Wages and Production (omitted from the 1941-42 and 1942-43 edition) are included in this volume. These, with material published in the Year Book for 1940-41, relate to the war period and the immediate post-war years.

Every care has been taken to keep the work free from errors, but if any be observed by readers, notification regarding them would be appreciated.

The "Statistical Register of New South Wales," published annually from this Bureau, will prove of service to those seeking more details regarding the matters treated generally in this Year Book. The "Monthly Summary of Business Statistics," published monthly, contains a summary of the latest available statistics of the State.

My thanks are tendered to the responsible officers of the various State and Commonwealth Departments and to others who have supplied information, often at considerable trouble. In particular I wish to thank Miss M. C. Ryan and Mr. A. E. Seymour (former and present Editor of Publications, respectively), Mr. K. Davison, Mr. W. Willcocks, Mr. R. B. Phibbs, and other Officers of the Bureau upon whom the great bulk of the work in preparing this volume devolved. Special acknowledgment is due also to the Government Printer and his staff.

S. R. CARVER,  
Government Statistician.

Bureau of Statistics and Economics,  
Sydney, 1st December, 1948.



# ERRATA

## PAGE.

92. In Table 78, 4th column (Male Deaths), for “44” read “40.”

576. In note‡ to Table 528, 2nd sentence, omit the words “costs and” and insert after the word “contract” the words “and costs.”

696. In the figures of quantity at foot of page, for the year 1942, for the figures “50” read “508.”

747. In Table 674, 7th column (other female wage and salary earners), for “163·0” read “168·0.”

801. Note \* to Table 706 should read “Northern District.”

810. In Table 716, under “Wheat (Grain)”, the figures following the undermentioned years should read: —

1938-39 ...	1,320,180	5·3	1	10·0
1941-42 ...	297,372	1·5	3	2·1
1944-45 ...	1,360,840	19·1	3	7·7
1945-46 ...	442,900	1·7	6	9·9
1946-47 ...	1,508,380	23·1	8	3·7



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# GEOGRAPHY.

**N**EW SOUTH WALES is situated entirely in the temperate zone of the Southern Hemisphere, and is on the opposite side of the world from the seat of the British Empire, of which it forms a part. It is distant from London 11,200 miles by the Suez Canal—the shortest shipping route. By regular air mail services, the flying time (including refuelling) from Sydney to London is sixty-two and three-quarter hours.

The name “New South Wales” was given to the eastern part of Australia (then known as New Holland) on its discovery by Captain Cook in 1770, and for fifty-seven years all Australian territory east of longitude 135° east was known by that name. In 1825, shortly after the separation of Tasmania (Van Diemen’s Land), the western boundary was moved to longitude 129°. The steps by which the territory of the State assumed its present boundaries and dimensions are shown below:—

TABLE 1.—Territorial Adjustments of New South Wales since 1788.

Date.	Nature of Territorial Adjustment.	Area involved in adjustment.	Area of New South Wales after adjustment §	Population of Territory known as New South Wales at end of year.
1788	New South Wales defined as whole of Australasia east of longitude 135° east.*	sq. miles. ...	sq. miles. 1,584,389	1,024 (26th Jan.)
1825	Tasmania practically separated from New South Wales.	26,215	1,558,174	} 33,500†
1825	Western boundary of New South Wales moved to longitude 129° east.	518,134	2,076,308	
1836	South Australia founded as a separate colony.	309,850	1,766,458	78,929
1841	New Zealand proclaimed a separate colony...	103,862	1,662,596	145,303
1851	Victoria proclaimed a separate colony ...	87,884	1,574,712	197,265
1859	Queensland proclaimed a separate colony ...	554,300	1,020,412	327,459
1861-3	Northern Territory and territory between longitude 129° and 132° east separated.	710,040	310,372	377,712
1911	Australian Capital Territory ceded to Commonwealth.	911	309,461	1,701,736
1915	Territory at Jervis Bay ceded to Commonwealth.	28	309,433	1,895,603

\* Literally interpreted, the boundaries defined included Fiji, Samoa, and some neighbouring islands.  
† Approximate. § Exclusive of area of Pacific Islands, except New Zealand.

The area of New South in the years 1788 to 1841, as shown above, is approximate only.

## BOUNDARIES AND DIMENSIONS.

The present boundaries of New South Wales are as follow:—On the east the South Pacific Ocean from Point Danger to Cape Howe; on the west, the 141st meridian of east longitude; on the north, the 29th parallel of south latitude, proceeding east to the Barwon River, and thereafter along the Macintyre and Dumaresq Rivers to the junction with Tenterfield Creek; thence along the crest of a spur of the Great Dividing Range, the crest of that range north to the Macpherson Range, and along the crest of the

Macpherson Range east to the sea; on the south, the southern bank of the Murray River to its source at the head of the river Indi, thence by a direct marked line to Cape Howe.

The greatest dimension of the State is along a diagonal line from Point Danger to the south-west corner of the State a distance of 850 miles. The shortest dimension, along the western boundary, is about 340 miles. The length of coast, measured direct from Point Danger to Cape Howe, is 683 miles, the actual length of seaboard being 907 miles. The greatest breadth, measured along the 29th parallel of latitude, is 756 miles.

#### AREA.

The total area of New South Wales, including Lord Howe Island, but excluding the Federal Territory, is 309,433 square miles, or 198,037,000 acres, being rather more than one-tenth of the area of Australia. About 4,639 square miles, or 2,969,080 acres, of the total surface are covered by water, including 176 square miles, or 112,750 acres, by the principal harbours. The area of Lord Howe Island is 5 square miles.

The area of New South Wales in relation to the total area of Australia is shown in the following statement:—

TABLE 2.—Area of Australian States and Territories.

State or Territory.	Area.	Per cent. of total Area.
	sq. miles.	
New South Wales ... ..	309,433	10·40
Victoria ... ..	87,884	2·93
Queensland ... ..	670,500	22·64
South Australia ... ..	380,070	12·78
Western Australia ... ..	975,920	32·81
Tasmania ... ..	26,215	·88
Northern Territory ... ..	523,620	17·60
Australian Capital Territory ...	911	·03
Federal Territory at Jervis Bay ...	28	·00
Commonwealth ... ..	2,974,581	100·00

New South Wales is approximately three and a half times as large as Victoria, nearly twelve times as large as Tasmania, and one-fifth smaller than South Australia. Queensland is more than twice and Western Australia three times as large as New South Wales.

The following table shows the extent of the State of New South Wales and of the Commonwealth of Australia in comparison with the total area of all countries of the world, the British Empire, and certain individual countries:—

TABLE 3.—Area of New South Wales and other Countries.

Country.	Area.	Ratio of Area to Area of New South Wales.	Ratio of Area to Area of Australia.
	sq. miles.		
New South Wales ... ..	309,433	1·000	·104
Commonwealth... ..	2,974,581	9·613	1·000
Great Britain ... ..	89,041	·288	·030
Canada ... ..	3,729,665	12·053	1·254
Argentina .. ..	1,153,119	3·729	·388
United States .. ..	3,022,387	9·768	1·016
British Empire ... ..	13,353,952	43·156	4·489
The World .. ..	52,055,879	168·231	17·500



## LORD HOWE ISLAND.

Lord Howe Island is a dependency of New South Wales, and, for the purpose of representation in the State Parliament, is included in King, one of the metropolitan electorates. It is situated about 300 miles east of Port Macquarie and 436 miles north-east of Sydney. The island was discovered in 1788. It is of volcanic origin, and Mount Gower, the highest point, reaches an altitude of 2,840 feet. The climate and soil are favourable for the growth of subtropical products, but on account of the rocky formation of the greater part of the surface of 3,220 acres, only about 300 acres are arable. The land has not been alienated, and is occupied rent free on sufferance, being utilised mainly for the production of Kentia palm seed. A Board of Control at Sydney manages the affairs of the island and supervises the palm seed industry. At 31st December, 1946, the population numbered 185 persons.

## PHYSICAL FEATURES.

New South Wales is divided naturally into four main divisions, which are strips of territory extending from north to south, viz., the coastal division; the tablelands, which form the Great Dividing Range between the coastal districts and the plains; the western slopes of the Dividing Range; and the western plains.

The coastal division is a narrow fertile plain. Its average width is 50 miles in the north and 20 miles in the south—the widest portion being 150 miles in the valley of the Hunter River. The coastline is regular with numerous sandy beaches, inlets and river estuaries, and, at intervals, there are lakes, partly marine and partly estuarine, which provide extensive fishing grounds and tourist and holiday resorts.

There are two tablelands—the northern and the southern—forming an extensive plateau region varying in width from 30 to 100 miles. The average height of the northern tableland is 2,500 feet, and a large portion in the New England Range has a greater altitude than 4,000 feet. The average height of the Southern Tableland is slightly less than the northern, though it contains the Kosciusko Plateau which is the most elevated part of the State. The Jenolan and other caves occur in the limestone belt in the central portion of the tablelands division.

To the westward the tablelands slope gradually to the great plain district which covers nearly two-thirds of the area of New South Wales. On the slopes there is generally an adequate rainfall. On the plains the surface consists of fertile red and black soils, but the rainfall is scanty, particularly in the far western section. These divisions are watered by the rivers of the Murray-Darling system and large storage dams have been constructed on the upper courses of the Murray, Murrumbidgee and Lachlan Rivers to maintain the supply in periods of scarce rainfall. The Darling and its tributaries are liable to shrinkage in dry weather, but when heavy rains occur in their upper basins they overflow their banks and spread over the surrounding country for miles, producing a luxuriant growth of grasses. The Broken Hill mining field is located near the western boundary of New South Wales.

The general configuration of New South Wales and distribution of rainfall are illustrated by a diagrammatic map at page 8. Another map, at page 9 indicates the principal agricultural, pastoral, dairying and mining regions of the State.

*Size of Rivers.*

The length of the principal rivers has been computed by the Lands Department of New South Wales on a uniform basis. Considerable data were obtained from the results of surveys of the greater part of the Murray, Darling, Murrumbidgee and Lachlan Rivers, and where such information was not available the length was measured on the standard parish maps. In every case the starting point was the furthest source of the river. The lengths as determined are as follows:—

TABLE 4.—Length of Principal Rivers.

Inland Rivers.	Length.	Coastal Rivers.	Length.	Coastal Rivers.	Length.
	miles.		miles.		miles.
Murray ... ..	1,609*	Tweed ... ..	50	Wollomba ... ..	46
Darling ... ..	1,702†	Richmond .. ..	163	Hunter ... ..	287
Murrumbidgee ...	981	Clarence ... ..	245	Hawkesbury‡ ...	293
Lachlan ... ..	922	Bellingen ... ..	68	Shoalhaven ... ..	206
Bogan ... ..	451	Nambucca ... ..	69	Clyde ... ..	67
Macquarie ... ..	590	Macleay ... ..	250	Moruya ... ..	97
Castlereagh ... ..	341	Hastings ... ..	108	Tuross ... ..	91
Namoi ... ..	526	Camden Haven ...	33	Bega ... ..	53
Gwydir ... ..	415	Manning ... ..	139	Towamba ... ..	57

\* 1,203 miles within New South Wales. † 1,826 miles within New South Wales. ‡ And main tributary.

The relative magnitude of some of the more important rivers as shown by the average annual volume of water which they carry has been ascertained from the records of river gaugings.

The following comparison is based on the records of the period 1905-1942. An acre-foot of water is the quantity which would cover an acre of land to a uniform depth of one foot:—

TABLE 5.—Drainage Area and Volume of Principal Rivers.

River.	Gauging Station.	Distance from Source of River.	Drainage Area.	Average Annual Run-off of Water.
		miles.	sq. miles.	acre-feet.
Murray ... ..	Toocumwal ... ..	435	10,160	4,912,730
Murrumbidgee ...	Wagga Wagga ...	396	10,700	2,819,820
Darling ... ..	Menindie ... ..	1,383	221,700	1,390,620
Macquarie ... ..	Narromine ... ..	318	10,090	627,530
Lachlan ... ..	Condobolin ... ..	380	10,420	429,540
Namoi ... ..	Narrabri ... ..	302	9,820	482,300
Hunter ... ..	Singleton ... ..	198	6,580	565,170
Lachlan ... ..	Forbes ... ..	253	6,775	579,400

The operation of the Hume Reservoir has affected the Toocumwal run-off since 1929, Burrinjuck has affected Wagga Wagga since 1914, and Wyangala Dam has affected Condobolin and Forbes since 1935.

## TOURIST RESORTS.

Throughout the tablelands and coastal districts of New South Wales there are many pleasure resorts, centres of scenic beauty, and some remarkable examples of natural phenomena.

Port Jackson, the harbour of the metropolis, has great natural beauty as well as shipping facilities for a large volume of trade. The Sydney Harbour Bridge, spanning one of its many arms, is one of the world's great engineering achievements.

Along the sea-board, scalloped coastline and sandy beaches contrast with the wooded and fern-strewn mountain-sides fringing the coast and from numerous points there are extensive panoramas of coast, coastal plain and mountains. Near the city, the National Park and Kuring-gai Chase are extensive reserves for recreation, intersected by waterways. The natural fauna and flora have been preserved and the scenery is typical of the Australian Bush. The Hawkesbury River, within 50 miles of Sydney, possesses a grandeur and natural beauty reminiscent of the Rhine.

The Blue Mountains (50 to 80 miles west of Sydney) contain many popular tourist resorts with scenery of rugged grandeur. Among the huge wooded valleys there are waterfalls, cascades and fern groves. There is a remarkable series of limestone caves at Jenolan in the central tableland, about 120 miles from Sydney. These caves contain dripstone formations, with stalactites and stalagmites of great delicacy and beauty. There are caves containing similar geological phenomena at Wombeyan and Yarraugobilly, also in the tablelands.

Canberra, the capital city of the Commonwealth of Australia, is situated in the hills fringing the Monaro Plains. Further inland, at a distance of 150 to 250 miles from the coast are the fertile hills of the sheep and wheat districts and, beyond them, stretching westward for hundreds of miles are the great plains utilised mainly for sheep and cattle grazing.

A separate department of the State under the administration of a Minister of the Crown was organised in August, 1946, to deal with tourist activities and immigration in New South Wales.

The Government Tourist Bureau freely issues literature and detailed information concerning resorts and travel throughout the State, and arranges itineraries and accommodation for tourists.



## CLIMATE.

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NEW SOUTH WALES is situated entirely in the temperate zone, and its climate is generally mild and equable, and mostly free from extremes of heat and cold, but occasionally very high temperatures are experienced in the north-west and very cold temperatures on the southern tablelands. Abundant sunshine is experienced in all seasons. On an average the capital city is without sunshine only twenty-three days per year, and the average range of temperature between the hottest and coldest month is not more than 19° Fahr. In the hinterland there is even more sunshine, and the range of temperature is greater, but observations with the wet bulb thermometer show that the temperature is not maintained in any part of the State at so high a level as to be detrimental to the health and physique of persons engaged in outdoor labour.

Practically the whole of New South Wales is subject to the bracing influence of frosts during five or more months of the year. Snow has been known to fall over nearly two-thirds of the State, but its occurrence is comparatively rare except in the tableland districts. Perennial snow is found only on the highest peaks of the southern tableland.

The seasons are not so well defined in the western interior as on the coast. They are generally as follows:—Spring during September, October, and November; summer during December, January, and February; autumn during March, April, and May; winter during June, July, and August.

### *Meteorological Observations.*

Meteorological services are administered by a Bureau, a branch of the Commonwealth Department of the Interior. A Divisional Meteorologist in Sydney directs observations throughout the State of New South Wales. Climatological stations are established at a number of representative towns, and rainfall recording stations at most centres.

Weather observations are telegraphed daily from many stations to the Weather Bureau, Sydney, where bulletins, rain maps and isobaric charts are prepared and issued for public information. Weather forecasts are prepared, also forecasts of conditions over the ocean and for aviation purposes. When occasion warrants, flood and storm warnings are issued to the press, broadcasting stations and to public departments.

Particulars of meteorological observations at various stations in New South Wales are published annually in the Statistical Register of New South Wales.

### *Winds.*

The weather in New South Wales is determined chiefly by anticyclones, or areas of high barometric pressure, with their attendant tropical and southern depressions. The anticyclones pass almost continually across the face of the continent of Australia from west to east. A general surging movement occasionally takes place in the atmosphere, sometimes towards, and sometimes from, the equator. The movement causes sudden changes in the weather—heat when the surge is to the south, and cold weather when it moves towards the equator.

New South Wales is fairly free from cyclonic disturbances, although occasionally a cyclone may result from an inland depression, or may reach the State from the north-east tropics or from the southern low-pressure belt which lies to the south of Australia. In the summer months the prevailing winds on the coast of New South Wales blow from the north-east and extend to the highlands; in the western districts the winds are usually from the south. Southerly changes are characteristic of the summer weather on the coast. These winds, which blow from the higher southern latitudes, cause a rapid fall in the temperature, and are sometimes accompanied by thunderstorms.

During winter, the prevailing direction of the wind is westerly. In the southern areas of the State the winds are almost due west, but proceeding northwards there is a southerly tendency. Australia lies directly in the great high-pressure belt during the cold months of the year.

#### *Rainfall.*

Rainfall in New South Wales is associated mainly with two types of depression—tropical and southern. The amount of rainfall varies very greatly over the wide expanse of territory, the average decreasing from about 80 inches per annum in the north-eastern corner to less than 7 inches in the north-western corner. Rainfall exerts a very powerful influence in determining the character of settlement, but its effects can be gauged only in a general way from annual averages as to quantity because consideration must be given also to other important factors such as seasonal distribution and reliability.

The coastal districts receive the largest annual falls, ranging from an average of 30 inches in the south to about 80 inches in the extreme north. Despite their proximity to the sea, the mountain chains are not of sufficient elevation to cause any great condensation; so that, with slight irregularities, the average rainfall gradually diminishes towards the north-western limits of the State.

An approximate classification of areas in New South Wales (including the Australian Capital Territory) according to average annual rainfall is as follows:—

TABLE 6.—Areas in New South Wales according to Annual Rainfall.

Annual Rainfall.	Area.		Proportion per cent. of total area.	Annual Rainfall.	Area.		Proportion per cent. of total area
	Sq. Miles.	Acres.			Sq. Miles.	Acres.	
inches. Over 70	549	351,360	•2	inches. 20 to 30	72,317	46,282,880	23•3
60 to 70	2,098	1,342,720	•7	15 to 20	54,315	34,761,600	17•5
50 to 60	5,046	3,229,440	1•6	10 to 15	72,937	46,679,680	23•5
40 to 50	11,240	7,193,600	3•6	Under 10	61,143	39,131,520	19•7
30 to 40	30,727	19,665,280	9•9	Total ..	310,372	198,638,080	100•0







Approximately 39 per cent. of the area of the State receives rains exceeding on the average 20 inches per year. Over the greater part of the State the annual rainfall varies on the average between 20 per cent. and 35 per cent. from the mean, but in the south-eastern corner the degree of variation is less and in the north-western quarter it is more. Protracted periods of dry weather in one part or another are not uncommon, but simultaneous drought over the whole territory of the State has been experienced only very rarely.

The seasonal distribution of rainfall may be described as follows: A winter rain region, which includes the southern portion of the western plains and about two-thirds of the Riverina, is bounded on the north by a direct line from Broken Hill to Wagga with a curve around Albury. A summer rain region, including the whole of the northern subdivision, is bounded on the south by a line which waves regularly, first south and then north of a direct line from the north-western corner of the State to Newcastle. Between these there extends a region, including the central and south-eastern portions of the State where the rains are distributed fairly evenly throughout the year, but a narrow coastal strip between Nowra and Broken Bay receives its heaviest rains in the autumn.

The chief agencies causing rainfall are southern depressions, tropical depressions, and anticyclonic systems. Southern depressions are the main cause of good winter rains in the Riverina and on the southern highlands. A seasonal prevalence of this type of weather would cause a low rainfall on the coast, and over that portion of the inland district north of the Lachlan River. A tropical prevalence ensures a good season inland north of the Lachlan, but not necessarily in southern areas. An anticyclonic prevalence results in good rains over coastal and tableland districts, but causes dryness west of the mountains.

The distribution of rainfall is dependent on three factors—the energy present in the atmospheric systems, the rate of movement of the atmospheric stream, and the prevailing latitudes in which the anticyclones are moving.

A diagrammatic map published on page 8 of this Year Book shows the distribution of rainfall in relation to the configuration of New South Wales.

#### *Rainfall in Divisions.*

Records of monthly rainfall at individual stations are published annually in the Statistical Register of New South Wales. The mean annual rainfall registered at recording stations in the main divisions of the State during each of the ten years 1937 to 1946 is shown below in comparison with the normal annual rainfall calculated over the period of thirty years, 1911-1940. In a few instances where records are not available for the full period, averages are stated for the period of record. The divisions (see frontispiece of this Year Book) are subdivided for purposes of the table into northern and southern or eastern and western sections, as indicated by the letters N., S., E., W.

TABLE 7.—Annual Rainfall (in inches).

Division.			Normal Rainfall.	Year.								
				1937.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.
Coast—												
North ...	N	55.43	72.47	65.01	58.47	44.51	45.19	54.17	53.42	48.43	63.06	47.72.
	S	55.37	70.81	59.82	50.46	39.54	38.88	51.53	54.24	47.79	64.24	43.68.
Hunter and Maunung	N	53.50	65.58	52.13	43.06	40.11	37.73	51.68	54.97	37.03	47.97	42.78.
	S	34.63	33.88	29.93	28.18	24.03	23.49	35.44	35.48	21.03	34.84	32.65.
Metropolitan Area	...	42.38	49.87	38.16	32.67	34.70	25.28	46.82	49.44	29.20	40.32	35.22.
Balance of Cumberland	...	30.04	29.17	29.76	21.84	20.32	16.74	31.15	39.69	12.67	31.55	25.91.
South ...	N	42.90	40.77	38.62	31.14	24.26	26.02	33.82	50.61	22.47	38.87	29.49.
	S	36.28	37.34	30.67	34.22	22.92	24.40	32.35	35.45	22.77	38.91	30.44.
Tablelands—												
North ...	E	39.72	48.04	36.28	40.73	23.15	33.96	39.97	34.38	27.99	48.66	37.28.
	W	30.45	28.40	28.51	28.32	21.84	30.03	36.20	30.48	25.68	34.16	28.57.
Central ...	N	23.10	20.62	18.27	23.58	16.43	21.78	28.76	23.89	16.48	28.34	18.25.
	S	33.50	29.95	28.05	31.03	22.01	25.39	37.53	37.02	15.75	33.23	27.17.
South ...	N	25.79	24.88	22.29	26.43	18.26	23.21	26.53	31.28	14.84	23.51	24.30.
Kosciusko Plateau...	S	33.38	30.08	22.24	36.72	27.05	27.06	38.24	32.72	23.70	31.99	42.48.
Western Slopes—												
North ...	N	26.06	23.27	22.95	20.77	18.91	23.95	27.64	25.21	17.18	24.85	21.38.
	S	24.34	23.31	20.77	19.75	17.07	27.40	27.42	24.37	18.01	25.19	14.33.
Central ...	N	22.85	21.55	17.49	22.87	13.42	25.78	25.97	20.22	15.31	26.82	13.98.
	S	21.93	17.77	16.36	21.91	14.25	20.46	26.84	22.56	10.69	23.64	16.53.
South ...	N	23.27	17.73	18.20	31.97	14.52	21.66	27.59	24.44	11.33	20.53	22.85.
	S	33.37	25.35	19.03	44.85	20.11	26.08	35.24	28.76	14.64	24.53	29.08.
Plains—												
North ...	E	21.83	21.15	21.95	21.23	13.68	21.92	28.24	20.52	14.07	21.57	15.97.
	W	18.41	16.87	17.05	21.28	13.06	18.44	24.77	15.37	9.14	17.78	17.37.
Central ...	N	17.13	11.29	14.14	21.13	9.49	17.08	20.84	14.84	11.02	18.74	11.02.
	S	17.44	11.97	15.36	18.73	10.70	15.66	18.29	16.70	7.87	16.00	12.94.
Riverina ...	E	18.47	14.25	10.82	30.23	9.68	15.79	18.31	14.27	9.62	14.06	17.31.
	W	13.71	8.78	8.57	22.17	5.83	11.68	13.44	10.36	7.03	10.59	14.36.
Western Division—												
Eastern half ...	N	12.83	7.40	9.63	18.39	7.73	13.08	16.17	9.65	7.24	10.78	8.56.
	S	12.87	9.42	7.66	21.34	5.91	10.35	12.33	9.55	7.61	10.16	13.55.
Western half ...	N	8.29	5.39	4.09	13.14	2.75	5.49	9.56	6.44	4.98	6.89	9.96.
	S	9.67	9.77	5.28	13.73	3.19	8.47	9.85	5.18	4.39	6.78	11.64.

In relation to the rural industries, the seasonal distribution of the rainfall, rather than the annual aggregate, is the important consideration. In wheat farming, for instance, sufficient moisture is required (1) to enable the soil to be prepared for planting, which takes place usually in May or June; (2) to promote germination of the seed and steady growth; (3) for the filling of the grain (about August or September for early crops) until harvesting, in November or December. Heavy rains may delay ploughing and sowing, or later in the season may cause disease or rank growth, or beat down the crops. For dairy farming, conducted mainly in the coastal areas, a more even distribution of rainfall is desirable to maintain the pastures in a satisfactory condition throughout the year. For sheep, spring and autumn rains are needed to ensure supplies of water and herbage, and summer rains of sufficient quantity to mitigate the effect of warm sunshine on the pastures. Too much rain is likely to cause disease in the flocks.

The relationship between rainfall and the principal rural activities is indicated in the diagrammatic maps at pages 8 and 9.

Monthly indexes of the rainfall in the wheat, sheep, and dairying districts respectively, are shown on page 20.

The normal monthly rainfall in each of the divisions is shown in the following table. The averages are based on records of rainfall at various stations during the years 1911 to 1940, or in a few instances on the years of this period for which records are available.

TABLE 8.—Normal Monthly Rainfall.

Division.				Jan.	Feb.	Mar.	Apr.	May.	Jun.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
				Inches.											
Coast—															
North	...	...	N	6.44	5.90	7.18	5.94	5.74	4.02	3.03	2.14	2.42	2.97	4.07	4.68
			S	6.19	6.96	7.16	6.21	4.51	3.81	3.41	1.94	2.84	3.59	3.71	5.04
Hunter and Manning			N	4.99	5.50	5.67	6.50	5.13	4.37	4.47	2.43	3.39	3.30	3.33	4.42
			S	3.19	2.95	3.54	3.54	2.74	2.78	3.19	1.84	2.48	2.30	2.49	3.60
Metropolitan Area	...	...	...	3.67	3.02	4.34	5.39	4.45	3.33	4.29	2.26	2.69	2.79	2.62	3.53
Balance of Cumberland	...	...	...	3.27	2.67	3.20	3.28	2.35	1.95	2.51	1.24	1.83	2.07	2.49	3.18
South	...	...	N	4.08	3.65	4.41	4.55	3.97	3.62	4.21	2.27	2.78	2.72	2.77	3.87
			S	3.81	3.19	3.79	3.51	3.54	2.94	2.69	1.96	2.43	2.60	2.63	3.19
Tablelands—															
North	...	...	E	5.26	4.94	4.70	3.30	2.57	2.60	2.33	1.34	1.92	2.65	3.45	4.66
			W	3.77	2.78	2.41	1.78	1.59	2.41	2.40	1.74	2.07	2.66	3.05	3.79
Central	...	...	N	2.13	1.87	2.04	1.75	1.46	1.94	2.03	1.55	1.61	1.81	2.43	2.48
			S	3.16	2.80	3.02	2.89	2.39	2.87	2.96	2.37	2.37	2.62	2.76	3.29
South	...	...	S	2.43	1.99	2.19	1.97	1.82	2.24	2.20	2.08	1.97	2.26	2.10	2.54
Kosciusko Plateau	...	...	...	2.71	2.24	2.57	2.30	2.57	3.07	2.88	3.20	3.12	3.16	2.59	2.97
Western Slopes—															
North	...	...	N	3.17	2.41	2.41	1.57	1.59	2.05	2.01	1.45	1.59	2.21	2.55	3.05
			S	2.71	2.08	2.10	1.56	1.29	2.11	2.02	1.56	1.62	2.07	2.31	2.91
Central	...	...	N	2.29	2.02	2.07	1.72	1.41	2.05	2.17	1.44	1.54	1.59	2.08	2.47
			S	1.85	1.52	1.73	1.76	1.47	2.29	2.05	1.85	1.55	1.77	1.87	2.22
South	...	...	N	1.69	1.52	1.77	1.83	1.74	2.56	2.27	2.25	1.80	1.93	1.80	2.11
			S	1.86	2.00	2.43	2.44	2.72	4.05	3.50	3.90	2.82	2.98	2.17	2.50
Plains—															
North	...	...	E	2.33	1.95	1.99	1.38	1.56	1.96	1.83	1.15	1.30	1.57	2.08	2.73
			W	2.09	1.73	1.75	1.18	1.33	1.74	1.47	0.91	1.03	1.24	1.72	2.22
Central	...	...	N	1.58	1.35	1.42	1.32	1.22	1.81	1.52	1.07	1.11	1.23	1.58	1.92
			S	1.49	1.46	1.31	1.38	1.28	1.92	1.43	1.38	1.20	1.36	1.40	1.83
Riverina	...	...	E	1.28	1.34	1.31	1.46	1.52	2.13	1.67	1.84	1.53	1.67	1.30	1.42
			W	1.00	0.95	0.86	1.07	1.18	1.49	1.25	1.26	1.08	1.28	1.05	1.24
Western Division—															
Eastern half	...	...	N	1.26	1.30	1.13	0.84	0.99	1.26	0.98	0.64	0.72	0.88	1.19	1.64
			S	0.91	1.12	0.88	0.83	1.08	1.38	1.04	1.09	1.01	1.13	1.04	1.36
Western half	...	...	N	0.69	1.05	0.55	0.58	0.75	0.80	0.59	0.34	0.48	0.68	0.70	1.08
			S	0.62	0.97	0.58	0.60	1.00	0.99	0.75	0.75	0.80	0.92	0.90	0.79

## EVAPORATION.

The rate of evaporation is influenced by the prevailing temperature and by the atmospheric humidity, pressure, and movement. In New South Wales evaporation is an important factor, because in the greater part of the inland districts water for use of stock is generally conserved in open tanks and dams. Actual measurements of the loss by evaporation have been made at a number of stations, and the average monthly evaporation, measured by loss from exposed water over a period of years is shown below, together with the average monthly rainfall over the same period. The total annual loss by evaporation is about 40 inches on the coast and southern tablelands and as much as 90 inches in the west. In the far north-western corner of the State, for which actual records are not available, the total loss from evaporation is probably equal to nearly 100 inches per year.



TABLE 9.—Average Evaporation and Rainfall over a Period of Years.

Station.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Year.
	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.
Wilcannia—													
Evaporation ...	9.51	7.95	7.20	4.98	2.93	1.89	1.94	2.88	4.46	6.36	7.55	8.95	66.60
Rainfall ...	0.71	1.16	0.57	0.06	0.87	0.85	0.65	0.50	0.55	0.83	0.80	1.28	9.43
Walgett—													
Evaporation ...	8.09	7.10	6.44	4.32	3.04	2.05	2.00	2.71	4.08	6.03	7.23	8.58	61.67
Rainfall ...	1.85	1.41	1.42	1.12	1.36	1.74	1.54	0.76	0.96	1.14	1.37	1.96	16.63
Leeton—													
Evaporation ...	8.88	6.95	5.63	3.12	1.96	1.23	1.17	1.48	2.56	4.17	6.34	7.87	51.36
Rainfall ...	1.22	0.86	1.03	1.47	1.38	1.84	1.36	1.67	1.31	1.49	1.26	1.24	16.13
Umberumberka (Near Broken Hill)—													
Evaporation ...	12.73	10.76	9.28	5.96	4.13	2.82	2.88	3.90	5.79	8.50	10.16	12.16	89.07
Rainfall ...	0.45	0.70	0.52	0.41	0.80	0.78	0.54	0.48	0.57	0.65	0.88	0.56	7.34
Burrinjuck Dam—													
Evaporation ...	5.99	4.99	4.21	2.40	1.17	0.70	0.71	1.05	1.92	3.01	4.29	5.35	35.79
Rainfall ...	1.95	1.90	2.16	2.63	2.75	4.25	3.79	3.98	2.76	2.86	2.24	2.23	33.50
Canberra—													
Evaporation ...	8.91	7.19	5.82	3.50	2.05	1.27	1.33	1.87	3.09	4.79	6.30	8.05	54.17
Rainfall ...	2.05	1.78	1.89	2.14	1.57	1.69	1.59	1.99	1.54	2.33	1.82	1.75	22.14
Sydney—													
Evaporation ...	5.42	4.33	3.71	2.68	1.88	1.49	1.57	2.02	2.79	3.94	4.73	5.52	40.08
Rainfall ...	3.88	3.20	4.74	5.96	5.48	4.05	5.15	2.41	2.81	2.84	2.57	3.63	46.72

## CLIMATIC DIVISIONS.

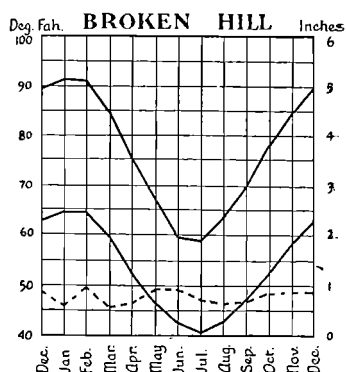
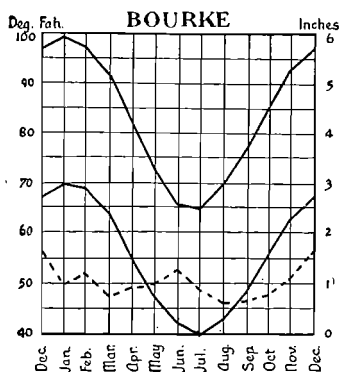
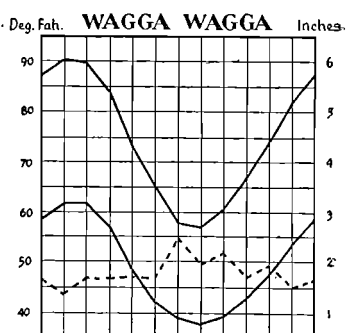
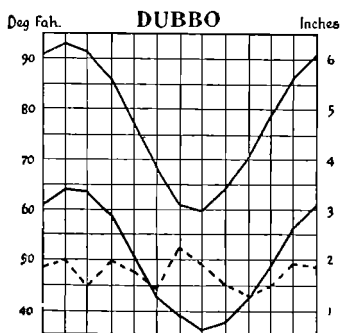
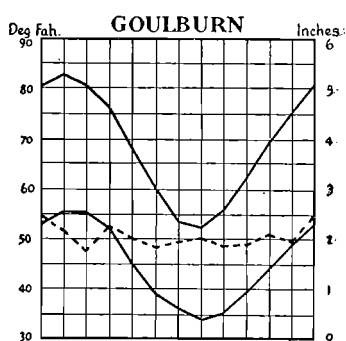
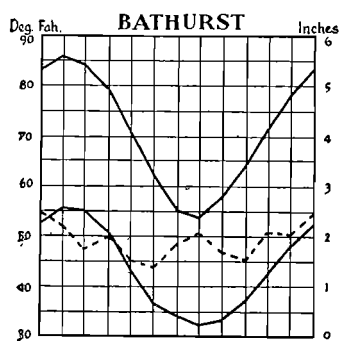
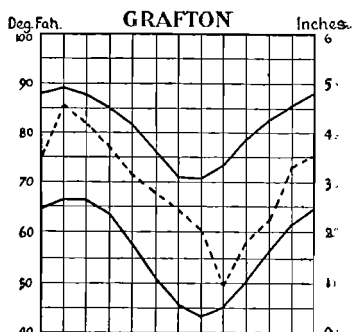
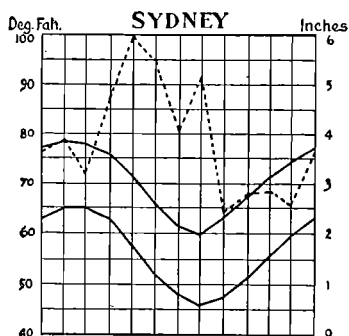
The territory of New South Wales may be divided into four climatic divisions, which correspond with the terrain—the coast, the tablelands, the western slopes of the Dividing Range, and the western plains (see map in frontispiece).

The northern parts of the State are generally warmer than the southern, the difference between the average temperatures of the extreme north and south being about 7° on the coast, 5° on the tablelands, and 7° on the slopes and plains. It should be noted, however, that the length of the State decreases from nearly 700 miles on the coast to about 340 miles on the western boundary. From east to west the average mean annual temperatures vary little except where altitudes are different, but usually the summer is hotter and the winter colder in the interior than on the coast. Thus at Sydney the average temperatures range from 71° in summer to 54° in winter, as compared with 76° in summer and 52° in winter at Wentworth in the same latitude in the western interior. Similar variations are found in the north. The mean daily range at any station is seldom more than 30° or less than 13°.

*Coastal Division.*

In the coastal division, which lies between the Pacific Ocean and the Great Dividing Range, the average rainfall is comparatively high and regular, and the climate, though more humid, is generally milder than in the interior.

## MEAN MAXIMUM AND MINIMUM TEMPERATURES AND RAINFALL.



The graph shows Mean Maximum and Minimum Temperatures in shade (Deg. Fah.) over a series of years and the average Monthly Rainfall (inches), 1911 to 1940.

Temperature is shown by firm line, Rainfall by broken line.

The following table shows the meteorological conditions of the principal stations in the coastal division, arranged in the order of their latitude. These stations are representative of the division, and the temperatures are the averages of a large number of years:—

TABLE 10.—Temperature and Rainfall—Coastal Division.

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall—Mean Annual, 1911-1940.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
	miles.	feet.	°	°	°	°	°	°	inches.
<i>North Coast—</i>									
Lismore ... ..	13	42	66·6	75·1	56·8	22·7	113·0	23·0	52·11
Grafton ... ..	22	21	68·4	77·0	58·1	24·8	114·0	24·0	34·68
<i>Hunter and Manning—</i>									
Jerry's Plains ...	53	150	64·5	75·8	52·2	28·8	120·5	19·0	24·84
West Maitland ...	18	40	64·6	74·7	53·5	21·7	115·0	28·0	33·35
Newcastle ... ..	1	106	64·4	72·1	55·5	14·4	112·0	31·0	41·36
Sydney ... ..	5	138	63·2	71·0	54·3	14·1	113·6	35·7	46·72
<i>South Coast—</i>									
Wollongong ... ..	0	33	63·0	70·0	55·0	16·6	115·2	33·6	48·49
Nowra ... ..	6	50	62·8	70·5	54·5	19·7	110·8	31·5	37·87
Moruya Heads ...	0	55	60·7	67·6	53·0	17·3	111·0	22·6	35·71
Bega ... ..	8	50	59·8	68·8	49·9	26·3	116·5	20·0	35·92

Taking the coast as a whole, the difference between the mean summer and mean winter temperature is about 18° only.

The north coast districts are favoured with a warm, moist climate, the rainfall being from 34 to 80 inches annually. The mean temperature for the year is from 66° to 69°, the summer mean being 75° to 77°, and the winter mean 56° to 59°. On the south coast the rainfall varies from 30 to 60 inches, and the mean temperature ranges between 60° and 63°, the summer mean being from 66° at the foot of the ranges to 70° on the sea coast, and the winter from 50° to 55° over the same area.

Coastal rains come from the sea with both south-east and north-east winds, being further augmented in the latter part of the year by thunderstorms from the north-west.

Sydney is situated on the coast about half-way between the extreme northern and southern limits of the State. Its mean annual temperature is 63° Fahr. The mean seasonal range is only 17°, calculated over a period of eighty-seven years, the mean summer temperature being 71° and the winter temperature 54°.

The following table shows the average meteorological conditions of Sydney, viz., barometric observations and temperature based on the experience of the eighty-seven years ended 1945, and rainfall during the period 1911 to 1940.

TABLE 11.—Temperature and Rainfall—Sydney.

Month,	Average Hourly Reading of Standard Barometer, corrected to 32° Fah.; Standard Gravity and Mean Sea Level.	Temperature (in Shade).			Rainfall.			
		Mean Standard.	Average Reading of Maximum Thermometer.	Average Reading of Minimum Thermometer.	Average.	Greatest.	Least.	Average number of days Rain.
	inches.	°	°	°	inches.	inches.	inches.	
January ... ..	29·893	71·6	78·4	64·9	3·88	15·26	0·25	13
February.. ...	29·941	71·3	77·7	65·0	3·20	18·56	0·12	12
March ... ..	30·014	69·4	75·8	63·0	4·74	20·52	0·42	13
April ... ..	30·068	64·7	71·4	57·9	5·96	24·49	0·06	14
May ... ..	30·085	58·9	65·8	52·1	5·48	23·03	0·18	12
June ... ..	30·067	54·7	61·3	48·1	4·05	16·30	0·19	11
July ... ..	30·073	52·9	59·9	45·9	5·15	13·21	0·12	12
August ... ..	30·067	55·3	63·0	47·5	2·41	14·89	0·04	10
September ... ..	30·013	59·2	67·2	51·3	2·81	14·05	0·08	11
October ... ..	29·972	63·5	71·3	55·8	2·84	11·13	0·21	11
November ... ..	29·939	66·9	74·3	59·6	2·57	9·88	0·07	11
December ... ..	29·882	70·0	77·1	62·9	3·63	15·82	0·22	13
Annual ... ..	30·001	63·2	70·3	56·2	46·72	82·76	23·01	143

The greatest rainfall recorded on any day, 11.05 inches, occurred on 28th March, 1942.

### Tablelands.

On the northern tableland the rainfall ranges from 29 inches in the western parts to 40 inches in the eastern. The temperature is cool and bracing, the annual average being between 56° and 60°; the mean summer temperature lies between 66° and 72°, and the mean winter between 44° and 47°. The southern tableland is the coldest part of the State, the mean annual temperature being about 54°. In summer the mean ranges from 55° to 68°, and in winter from 33° to 45°. At Kiandra, the elevation of which is 4,578 feet, the mean annual temperature is 44.3°. Near the southern extremity of the tableland, on the Snowy and Muniong Ranges, snow is usually present throughout the year.



The statement below shows, for the tableland districts, particulars of average temperature and rainfall at typical stations over a period of years:—

TABLE 12.—Temperature and Rainfall—Tablelands.

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual 1911-1940.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
<i>Northern Tableland—</i>	miles.	feet.	°	°	°	°	°	°	inches.
Tenterfield ...	80	2,837	58·4	68·7	46·8	24·0	101·5	18·0	30·18
Inverell ...	124	1,980	59·9	71·7	47·3	29·8	107·0	14·0	28·77
Glen Innes ...	90	3,518	56·2	66·5	44·6	24·5	101·4	16·0	31·32
<i>Central Tableland—</i>									
Cassilis (Dalkeith) ...	120	800	60·2	72·1	47·7	24·1	109·5	17·5	21·27
Mudgee ...	121	1,635	60·1	72·8	47·1	27·9	113·2	15·0	24·02
Bathurst ...	96	2,204	57·1	69·5	44·5	27·1	112·9	13·0	22·56
Katoomba ...	58	3,356	54·1	63·7	43·6	15·6	101·8	26·5	53·17
Crookwell ...	81	2,910	53·1	64·6	41·4	24·0	105·0	15·0	33·91
<i>Southern Tableland—</i>									
Goulburn ...	54	2,093	56·5	67·9	44·6	23·3	111·0	13·0	24·27
Canberra ...	68	1,906	56·1	68·2	43·8	22·6	109·0	14·0	*22·14
Kiandra ...	88	4,578	44·3	55·3	32·7	20·9	94·5	5 below zero	60·67
Bombala ...	37	2,313	52·7	62·7	41·9	24·6	104·5	14·0	26·33

\*1924 to 1942.

#### *Western Slopes.*

On the western slopes the rainfall is distributed uniformly, varying from an annual average of 20 inches in the western parts to 30 inches in the eastern; the most fertile part of the wheat-growing area of the State is situated on the southern part of these slopes, where the average rainfall is about 25 inches per annum. The mean annual temperature ranges from 67° in the north to 59° in the south; in the summer from 80° to 72°, and in the winter from 53° to 46°.

North of the Lachlan River, good rains are expected from the tropical disturbances during February and March, although they may come as late as May, and at times during the remainder of the year.

In the Riverina district, south of the Murrumbidgee generally, and on the south-western slopes, fairly reliable rains, light but frequent, are experienced during the winter and spring months.

The next statement gives information as to average temperature and rainfall for the principal stations on the western slopes over a period of years:—

TABLE 13.—Temperature and Rainfall—Western Slopes.

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall—Mean Annual, 1911-1940.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
<i>North Western—</i>	miles.	feet.	°	°	°	°	°	°	inches.
Moree ...	204	686	67·5	80·4	53·4	28·4	117·0	19·0	21·43
Narrabri ...	193	697	66·6	80·1	52·1	27·7	117·0	20·5	24·14
Quirindi ...	115	1,278	61·8	74·3	48·4	29·2	114·0	13·0	25·58
<i>Central Western—</i>									
Dubbo ...	177	870	63·7	77·3	49·7	27·2	115·4	16·9	20·91
<i>South Western—</i>									
Young... ..	140	1,416	59·5	72·6	46·6	25·7	113·0	20·0	24·59
Wagga Wagga ...	158	612	61·6	74·9	48·6	24·8	117·0	22·0	21·42
Urana... ..	213	395	62·1	75·1	48·8	25·7	119·0	25·0	17·40
Albury ...	175	530	60·9	74·2	48·0	26·6	117·3	19·9	27·66

#### Western Plains.

The western district consists of a vast plain, its continuity being broken only by the Grey and Barrier Ranges. Owing to the absence of mountains in the interior, the annual rainfall over a great part of this division, which lies in the zone of high pressure, does not exceed 10 inches. It increases from 7 inches on the north-western boundary of the State to 10 and 15 inches along the Darling River, and 20 inches on the eastern limits of the plain country. The lower Murray and Murrumbidgee basins, which extend into the western plains, are closer to the Victorian than the New South Wales coast, and this factor facilitates precipitation over that region under the influence of southern depressions. The mean annual temperature ranges from 69° in the north to 62° in the south; in the summer from 83° to 74°, and in the winter from 54° to 50°.

The summer readings of the thermometer in this district are from 10° to 20° higher than those on the coast. Excessive heat is experienced occasionally during the summer season.

In winter the average temperature is 52° and skies are clear. Owing chiefly to the dryness of the climate, these inland regions produce merino wool of excellent quality.

Particulars of meteorological conditions of the western plains and the Riverina division are shown in the following statement:—

TABLE 14.—Temperature and Rainfall—Western Plains.

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall—Mean Annual, 1911-1940.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
	miles.	feet.	°	°	°	°	°	°	inches.
Brewarrina ...	345	430	67·9	81·7	53·5	27·6	120·0	22·0	13·68
Bourke ...	386	361	69·1	83·2	54·1	27·6	125·0	25·0	11·74
Wilcannia ...	473	267	66·5	80·1	52·5	26·6	122·2	21·8	9·43
Broken Hill ...	555	1,000	64·5	77·2	51·4	23·2	115·9	27·0	9·20
Condobolin ...	227	655	65·0	78·7	50·9	26·8	120·0	20·0	16·12
Wentworth ...	478	125	63·8	75·8	51·8	24·1	118·5	21·0	10·80
Hay ...	309	310	62·7	75·2	50·1	26·7	118·2	22·9	13·65
Deniliquin ...	287	311	61·8	74·1	49·7	24·1	116·5	26·0	15·46

## METEOROLOGICAL CONDITIONS 1944 to 1947.

Rainfall in 1944 was below normal throughout New South Wales. May and August were the only months when rains were generally in excess of normal though the northern and central divisions received useful falls in January or February and in April, and the southern districts in April and October. In the closing months of the year there was a deficiency of rain in all divisions.

Seasonal temperatures varied considerably during 1944. Severe frosts and snow occurred during the winter and brief periods of very hot weather with dust storms in the western districts during the summer.

Seasonal conditions improved during 1945. Beneficial rains fell in most districts early in the year though drought persisted in the west. In southern inland areas relief was only temporary and further dry weather was experienced during the autumn. General rains occurred in June and falls in August were above normal in all inland divisions, moreover the southern and western divisions received substantial rains in October. On the other hand rainfall was below normal in the South Coast division from July, and in the northern and central inland districts from September, until the end of the year.

Temperatures during 1945 were generally close to normal though high temperatures prevailed for brief periods in January and December. July was colder than usual and there were heavy falls of snow on the southern tablelands.

The seasonal distribution of rainfall in 1946 was not favourable for rural production. In the early months nearly all districts received good rains and the falls were heavy in the Riverina, central and south-western slopes and north coast divisions. Later, with the approach of winter, widespread drought developed. Inland, rainfall was deficient in the northern districts from February, and in the central plains and slopes from April to August inclusive. In the northern coastal areas floods caused damage to natural pasturages in February and March, and the winter was exceptionally dry, causing extensive failures of fodder crops. Drought conditions were relieved in the northern and western, and parts of the central districts by substantial rains in September.

In the southern districts there were beneficial rains in June and July and rainfall was more favourable during the greater part of the year than in other divisions. But in September and October only light showers fell in the Riverina; this caused deterioration in the wheat crops and November rains were too late to restore them.

Notwithstanding the dry weather, unusually high temperatures were not experienced during 1946. Severe frosts occurred in June and July and snowfalls in the elevated districts to the south were the heaviest for many years.

The dry period was terminated in February, 1947, when substantial rains fell in all parts of the State. The falls were heavy in the western and northern districts and pastures were restored in the dairying areas which had received good rains also in January. In March, rainfall exceeded normal in the central inland districts and the central and south coastal divisions. In the following month rainfall was generally deficient inland from the tablelands.

*Index of Monthly Rainfall, 1943 to 1947.*

An index of rainfall in the sheep and wheat and coastal dairying districts in each month since January, 1943, is shown below. The index shows the weighted average ratio of actual to normal rainfall in each month; the weights are based on the average number of sheep depastured or the average area sown with wheat or the average production of milk in the districts concerned. Normal rainfall represents the average in the month during a long period of years.

TABLE 15.—Index of Rainfall, Monthly from January, 1943.

Month,	Sheep Districts.					Wheat Districts.				Dairying Districts. (Coastal only.)			
	N.	C.	S.	W.	T.	N.	C.	S.	T.	N.	C.	S.	T.
1943.													
Jan. ...	135	124	171	108	141	157	115	144	138	64	104	68	75
Feb. ...	36	56	49	90	52	44	60	56	55	81	24	34	60
Mar. ...	13	13	22	5	15	10	12	21	17	44	53	24	44
Apl. ...	144	111	157	89	133	156	127	156	148	54	39	38	48
May ...	82	102	128	49	124	112	176	94	118	153	283	384	216
June ...	63	49	48	36	51	66	55	50	53	25	19	34	25
July ...	53	58	87	71	67	58	63	96	83	4	12	5	6
Aug. ...	105	96	120	82	105	88	103	106	108	112	224	231	156
Sept. ...	110	118	120	115	116	111	125	123	122	124	144	120	128
Oct. ...	98	79	100	64	90	93	74	85	83	156	104	189	147
Nov. ...	175	197	163	115	170	149	204	162	171	215	220	158	209
Dec. ...	89	51	30	4	50	76	52	14	32	212	125	106	176
1944.													
Jan. ...	95	42	13	17	45	87	42	9	28	232	119	33	178
Feb. ...	70	78	11	112	58	83	56	11	32	29	70	12	37
Mar. ...	19	50	57	30	41	15	52	55	49	54	51	25	50
Apl. ...	34	33	105	70	61	52	36	104	80	4	48	102	28
May ...	122	123	155	63	127	169	118	134	135	27	51	232	59
June ...	21	13	13	19	16	21	13	12	14	62	62	20	57
July ...	109	67	41	61	70	102	59	41	53	188	105	43	48
Aug. ...	233	152	42	175	142	230	127	47	90	279	189	109	234
Sept. ...	47	34	20	19	31	34	39	19	26	77	59	16	65
Oct. ...	30	33	95	28	52	23	38	98	73	31	33	54	34
Nov. ...	35	45	46	32	41	39	43	47	45	73	31	28	56
Dec. ...	42	8	55	49	37	34	11	56	42	59	32	43	50
1945.													
Jan. ...	104	151	114	42	114	109	159	116	127	51	83	134	70
Feb. ...	189	125	82	69	123	155	110	71	92	106	89	86	99
Mar. ...	24	40	30	28	31	31	41	26	30	46	33	35	41
Apl. ...	94	110	78	32	87	101	103	38	63	124	83	348	142
May ...	131	140	55	97	105	160	139	55	90	94	93	69	90
June ...	212	225	137	122	181	177	219	143	167	429	321	205	373
July ...	103	71	71	205	95	83	58	77	78	164	126	40	139
Aug. ...	135	157	151	107	144	156	139	157	152	44	61	34	47
Sept. ...	46	16	34	18	30	23	18	32	27	68	18	21	50
Oct. ...	42	68	125	116	85	53	72	128	104	94	80	77	89
Nov. ...	66	50	78	28	61	76	60	69	07	115	129	82	115
Dec. ...	54	43	46	61	49	42	48	48	47	92	69	67	82
1946.													
Jan. ...	153	100	166	236	151	130	110	184	158	92	44	67	77
Feb. ...	95	129	327	228	195	49	153	363	269	174	77	100	140
Mar. ...	66	76	105	43	79	48	76	113	95	104	197	63	160
Apl. ...	66	90	61	14	65	60	78	48	57	98	291	136	152
May ...	39	40	53	24	42	37	35	49	43	13	22	30	18
June ...	23	38	75	64	49	33	38	59	50	6	69	173	44
July ...	17	38	109	34	55	20	42	114	84	1	2	7	2
Aug. ...	2	13	60	8	25	1	14	60	41	20	3	19	16
Sept. ...	203	68	15	156	99	160	47	10	39	101	76	52	88
Oct. ...	34	63	51	17	46	24	61	46	47	103	51	66	85
Nov. ...	84	77	191	73	116	71	100	196	155	45	66	225	73
Dec. ...	78	83	98	116	90	72	88	102	94	79	77	34	72
1947.													
Jan. ...	77	21	8	7	31	51	27	8	18	190	75	31	140
Feb. ...	271	271	176	462	261	263	257	175	207	198	242	160	204
Mar. ...	142	82	151	178	132	100	83	165	136	126	70	39	101
Apl. ...	81	59	96	45	76	58	76	95	85	127	113	186	131

N., Northern; C., Central; S., Southern; W., Western; T. Total.

## OBSERVATORY.

Sydney Observatory, lat.  $33^{\circ} 51' 41.1''$  south, long.  $151^{\circ} 12' 17.8''$  east, established in the year 1856, is a State institution. The work of the Observatory is astronomical, and the instruments are a 6" meridian circle,  $11\frac{1}{2}''$  equatorial refractor, 13" astrograph and a Milne seismograph. The scientific work consists of the determination of the position, distribution, and movement of stars in the region of the sky allotted to Sydney (viz.,  $52^{\circ}$  to  $65^{\circ}$  of south declination) in the international astrographic programme, and in the observation of comets, occultations of stars by the moon, etc. Readings of earth tremors from the seismograph are sent to other seismological observatories and to the International Seismological Summary. Astronomical observations are made for the determination of time and signals are transmitted from the Observatory for use in navigation and for civil purposes. Educational work consists of lectures on astronomy and reception of visitors interested in the subject.

## STANDARD TIME.

The mean time of the 150th meridian of east longitude, or 10 hours east of Greenwich, has been adopted as the standard time in New South Wales, which is, therefore, 10 hours ahead of the standard time in England.

In the district of Broken Hill, South Australian standard time is generally observed, viz.,  $142\frac{1}{2}^{\circ}$  of east longitude, or 9 hours 30 minutes east of Greenwich. In the States of Queensland, Victoria, and Tasmania, the standard time is the same as in New South Wales. In Western Australia the standard time is the  $120^{\circ}$  of east longitude, or 8 hours east of Greenwich.

*Daylight Saving.*

Standard time throughout Australia was advanced by one hour as a war-time measure in 1942, and two subsequent seasons, viz., from 2 a.m. on 1st January, 1942, to 2 a.m. on 29th March, 1942, and similarly by one hour between 27th September, 1942, and 28th March, 1943, and (except in Western Australia) from 3rd October, 1943, to 26th March, 1944.

## TIDES.

A self-recording tide-gauge has been in operation at Fort Denison, in Port Jackson, since 1866. The datum of hydrographic plans, tide records and predictions is zero of the gauge. The heights of the various planes above this datum are as follows:—Mean low water spring 0.39 feet, mean low water 0.79 feet, mean high water 4.32 feet, mean high water springs 4.72 feet. The mean range of tides is 3 feet  $6\frac{1}{4}$  inches. The lowest tide was recorded on 16th July, 1916, when the tide fell 1 foot 3 inches below datum. The highest tide was recorded on 26th May, 1880, viz., 7 feet  $6\frac{1}{2}$  inches; in 1876 the gauge recorded 7 feet  $4\frac{1}{2}$  inches on 22nd June, and 7 feet 3 inches on 21st July. On 3rd August, 1921, the gauge registered 7 feet 2 inches, and on that day occurred the greatest tidal range on record—6 feet  $9\frac{1}{2}$  inches.

At Port Hunter the average rise and fall of tides is 3 feet  $5\frac{1}{2}$  inches, and of spring tides 4 feet 3 inches; the greatest range being 6 feet 5 inches. The highest tide registered was 7 feet 4 inches in May, 1898.

On the coast the average rise of spring tides is 4 feet 3 inches approximately.

## CONSTITUTION AND GOVERNMENT.

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THERE are in New South Wales three administrations, viz., the Federal, whose seat is in the Australian Capital Territory at Canberra, controls matters affecting the interests of Australia as a whole; the State, located in Sydney, deals with the more important questions of State and local interest; and the Local Government bodies, with headquarters at convenient centres within their respective areas, control matters of purely local concern in these areas which extend over nearly two-thirds of the State.

The State Government in its present form dates from 1856. The Federal Government was established in 1901. Local Government, previously limited to municipalities scattered throughout the State, was extended to the whole of the eastern and central territorial divisions in 1906.

The Legislative Council of New South Wales, formerly nominee, became an indirectly elective chamber in 1933. The Federal Constitution was amended in respect of financial relations between Commonwealth and States in 1910, also in 1928 when the financial agreement providing for the Constitution of the Australian Loan Council was validated.

A brief account of the early forms of government in New South Wales and of the introduction of the present parliamentary system was published at page 25 of the 1921 edition of the Year Book. The system of Local Government is described in the chapter "Local Government" of this Year Book.

### SYSTEM OF STATE GOVERNMENT.

The Constitution of New South Wales is not framed completely in the Constitution Act of 1902-1937, and is not entirely written. It is drawn from several diverse sources, viz., certain Imperial statutes, such as the Colonial Laws Validity Act (1865) and the Commonwealth of Australia Constitution Act (1900); the Letters Patent and the Instructions to the Governor; an element of inherited English law; some federal statutes, including amendments to the Commonwealth of Australia Constitution Act; certain State statutes; numerous legal decisions; and a large element of English and local convention.

The Imperial Parliament is legally omnipotent in local as well as in imperial affairs, but, by convention, its authority to legislate in respect of affairs of the State has not been exercised for many years. For all practical purposes therefore, the Parliament of New South Wales may legislate for the peace, welfare and good government of the State in all matters not specifically reserved to the Commonwealth.

Imperial legislation forms the basis of the Constitution of New South Wales and powers vested in the Crown by virtue of its prerogative are exercised by the Governor.

#### *The Governor.*

In New South Wales the Governor is the local representative of the Crown, and through him the powers of the Crown in the matters of local concern are exercised. In addition he is titular head of the Government of New South Wales; he possesses powers similar to those of a constitutional sovereign, and he performs the formal and ceremonial functions which attach to the Crown in its august capacity.



His constitutional functions are defined and regulated partly by various statutes, which from time to time cast new duties upon him, partly by the Letters Patent constituting his office, and partly by the Instructions to the Governor. The Letters Patent and Instructions were given under the Royal Sign Manual in 1900, and amended in 1909, 1935 and 1938.

These functions cover a wide range of important duties, and it is directed that "in the execution of the powers and authorities vested in him the Governor shall be guided by the advice of the Executive Council." This provision, however, is modified by the further direction that, if in any case the Governor should see sufficient cause to dissent from the opinion of his Ministers, he may act in the exercise of his powers and authority in opposition to the opinion of his Ministers, reporting the matter to His Majesty through the Secretary of State for the Dominions without delay. The extent of the Governor's powers, however, tends to contract, though he possesses important spheres of discretionary action, *e.g.*, in regard to dissolution of Parliament. Moreover, he is entitled to full information on all matters to which his assent is sought, and may use his personal influence for the good of the State. The general nature of his position is such that he is guardian of the Constitution and bound to see that the great powers with which he is entrusted are not used otherwise than in the public interest. In extreme cases his discretion constitutes a safeguard against malpractice.

His more important constitutional duties are to appoint the Executive Council and to preside at its meetings; to summon, prorogue, and dissolve the Legislature; to assent to, refuse to assent to, or reserve bills passed by the Legislature; to keep and use the Public Seal of the State; to appoint all ministers and officers of State; and, in proper cases, to remove and suspend officers of State. He exercises the King's prerogative of mercy, but only on the advice of the Executive Council in capital cases, and of a Minister of the Crown in other cases.

With respect to responsibility for his actions the Governor is amenable to the law in the local courts, and, although the State accepts responsibility for his official acts, he is personally liable for his unofficial actions, civil and criminal. Politically he is indirectly responsible to the Imperial Parliament through the Secretary of State for the Dominions, but in State politics he usually acts on the advice of his Ministers, and they take the responsibility for their advice. However, in an extreme case if good reason existed the local Legislature might be justified in asking for his removal.

The Governor's normal term of office is five years. His salary is £5,000 per annum, which, with certain allowances, is provided in terms of the Constitution Act out of the revenues of the State.

The periods for which the Governor may absent himself from the State are limited by the Instructions. When he is absent the Lieutenant-Governor acts in his stead in all matters of State. For this purpose the Chief Justice is usually appointed. In the event of the Lieutenant-Governor not being available to fill the Governor's position, an Administrator assumes office under a dormant Commission appointing the Senior Judge of the State as Administrator.

Captain the Right Honourable John de Vere, Baron Wakehurst, K.C.M.G., was Governor from 8th April, 1937, to 6th June, 1945. His successor, Lieutenant-General John Northcott, C.B., M.V.O., assumed the office on

1st August, 1946. He is the first Australian-born Governor of New South Wales. Sir Frederick Richard Jordan, K.C.M.G., is Lieutenant-Governor and Chief Justice.

### *The Executive Council.*

All important acts of State, except in the limited spheres where the Governor possesses discretionary powers, are performed or sanctioned by the Governor-in-Council.

The Council is established by virtue of the Letters Patent constituting the office of Governor, and it is composed of such persons as the Governor is pleased to appoint. Its members are invariably members of the Ministry formed by the leader of the dominant party in the Legislative Assembly. When a member resigns from the Ministry he resigns also from the Executive Council, otherwise he may be dismissed by the Governor.

The Executive Council meets only when summoned by the Governor, who is required by his Instructions to preside at its meetings unless absent for "some necessary or reasonable cause." In his absence the Vice-President presides.

### *The Ministry or Cabinet.*

In New South Wales the Ministry and Cabinet both consist, by custom, of those members of Parliament chosen to administer departments of State, and to perform other executive functions. The Ministry is answerable to Parliament for its administration, and it continues in office only so long as it commands the confidence of the Legislative Assembly, from which nearly all its members are chosen. An adverse vote in the Legislative Council does not affect the life of the Ministry. The constitutional practices of the Imperial Parliament with respect to the appointment and resignation of ministers have been adopted tacitly with some minor modifications. Cabinet acts under direction of the Premier, who supervises the general legislative and administrative policy and makes all communications to the Governor.

Meetings of Cabinet are held to deliberate upon the general policy of the administration, the more important business matters of the State and the legislative measures to be introduced to Parliament, and to manage the financial business of the State. Its decisions are carried into effect by the Executive Council or by individual Ministers as each case requires.

Administrative matters of minor importance are determined by ministerial heads of departments without reference to the Executive Council, and every Minister possesses considerable discretionary powers in the ordinary affairs of his department.

The Ministry in office in September, 1947, consisted of the following members:—

Premier and Colonial Treasurer.—The Hon. James McGirr, M.L.A.  
Deputy Premier, Colonial Secretary, Secretary for Mines and Minister for National Emergency Services.—The Hon. J. M. Baddeley, M.L.A.

Minister for Housing and Assistant Treasurer.—The Hon. C. R. Evatt, K.C., LL.B., M.L.A.

Minister for Education.—The Hon. R. J. Heffron, M.L.A.

Attorney-General.—The Hon. C. E. Martin, M.Ec., LL.B., M.L.A.

Minister for Labour and Industry and Minister for Social Welfare.—  
The Hon. Hamilton Knight, M.L.A.

Minister of Justice and Vice-President of the Executive Council.—  
The Hon. R. R. Downing, LL.B., M.L.C.

Secretary for Public Works and Minister for Local Government.—  
The Hon. J. J. Cahill, M.L.A.

Minister for Health.—The Hon. C. A. Kelly, M.L.A.

Minister for Transport.—The Hon. M. O'Sullivan, M.L.A.

Assistant Minister.—The Hon. W. E. Dickson, M.L.C.

Minister for Agriculture.—The Hon. E. H. Graham, M.L.A.

Minister for Conservation.—The Hon. G. Weir, M.L.A.

Minister in Charge of Tourist Activities and Immigration.—The Hon.  
F. J. Finnan, M.L.A.

Secretary for Lands.—The Hon. W. F. Sheahan, LL.B., M.L.A.

Minister for Building Materials.—The Hon. C. H. Matthews, M.L.A.

The salaries of Ministers as fixed by statute in 1925 were reduced in April, 1930, August, 1931, and December, 1932, and were restored to the former level on 1st July, 1938, as shown below:—

TABLE 16.—Salaries of State Ministers.

Ministers.	As from 1st July, 1925.	As from 1st April, 1930.	As from 7th Aug., 1931.	As from 1st Dec., 1932.	As from 1st July, 1938.
	£	£	£	£	£
The Premier ... ..	2,445	2,078	1,800	1,710	2,445
The Attorney-General ... ..	2,095	1,781	1,564	1,486	2,095
The Vice-President of the Executive Council (and leader of the Government in the Legislative Council) ...	1,375	1,169	1,072	1,018	1,375
Other Ministers of the Crown ...	17,505	14,879	13,167	12,510	17,505
Total ... ..	23,420	19,907	17,603	16,724	23,420

These amounts include the annual allowances paid to Ministers as members of the Legislative Assembly.

#### THE STATE LEGISLATURE.

The State Legislature consists of the Crown and two Houses of Parliament, and State laws (except in the event of disagreement between the Houses—see page 25) are enacted “by the King’s Most Excellent Majesty, by and with the advice and consent of the Legislative Council and the Legislative Assembly in Parliament assembled.” It exercises a general power of legislation, and possesses plenary and not delegated authority. The Constitution Act of 1902 provides that “the Legislature shall, subject to the provisions of the Commonwealth of Australia Constitution Act, have power to make laws for the peace, welfare, and good government of New South Wales in all cases whatsoever.” It can delegate its powers, and within its territory its enactments are restricted only by legislation of the Imperial Parliament intended to apply to New South Wales, and by valid federal enactments.

The two Houses of Parliament are the Legislative Council (or Upper House) and the Legislative Assembly (or Lower House). Their powers are nominally co-ordinate, but it is provided that bills appropriating money or imposing taxation and bills affecting itself must originate in the Legislative Assembly, which is the chamber elected by general franchise, and controls taxation and expenditure. Moreover, the responsibility of the Ministry for financial measures is secured by a provision of the Constitution Act that the Legislative Assembly may not appropriate any part of the Consolidated Revenue Fund or of any other tax or impost for any purpose unless it has first been recommended by a message of the Governor to the Assembly during the current session.

Every member of Parliament must take an oath or make an affirmation of allegiance.

By virtue of the Constitution Act it is a function of the Governor to summon, prorogue, and dissolve Parliament, but it is provided that both Houses shall meet at least once in every year, so that a period of twelve months shall not elapse between sessions. The continuity of Parliament is ensured by law. The Parliamentary Electorates and Elections Act, passed in 1912 and amended in subsequent years, provides that writs for the election of new members must be issued within four days after the dissolution of the Legislative Assembly, that they must be returned within sixty days after issue (unless otherwise directed by the Governor), and that Parliament shall meet within seven days of the return of writs. The duration of Parliament was limited to three years in 1874.

The procedure of each House is conducted according to that of its prototype in the Imperial Parliament, but comprehensive standing orders for regulation of the business of each House have been drawn up. Provision has been made under the Constitution Act, 1902, as amended by the Constitution Amendment (Legislative Council) Act, No. 2 of 1933, to meet cases of disagreement arising between the two Houses, eliminating the possibility of a deadlock (see page 27).

With the consent of the Legislative Council, any member of the Legislative Assembly who is an Executive Councillor may sit in the Upper House for the purpose of explaining the provisions of bills relating to or connected with the Department administered by him. He may take part in debate and discussion, but may not vote in the Legislative Council.

Controversy has centred around the powers of the Governor in granting a dissolution of Parliament. Strictly speaking, only the Legislative Assembly is dissolved, but Parliament is ended thereby, because both Houses are necessary to constitute a Parliament. The main cases in which a dissolution may be granted arise when, on a question of policy, the Ministry sustains an adverse vote in the Legislative Assembly, and when the Legislative Assembly becomes factious, or will not form a stable administration.

#### *The Legislative Council.*

The Legislative Council was a nominee chamber, consisting of a variable number of members appointed for life without remuneration, until 1934 when it was reconstituted in terms of the Constitution Amendment (Legislative Council) Act, No. 2 of 1933.

The Legislative Council, as reconstituted on 23rd April, 1934, consists of sixty elected members, whose services are rendered without remuneration. The members of the Legislative Assembly and the Legislative

Council comprise the "electorate." They record their votes at simultaneous sittings of both Houses. Voting is by secret ballot. Casual vacancies are filled by a like election. Contested elections in which more than one seat are to be filled are decided according to the principle of proportional representation, each voter having one transferable vote; but where only one member is to be elected, a preferential system is used.

Any man or woman who is entitled to vote at the election of members of the Legislative Assembly, and has been resident for at least three years in the Commonwealth of Australia, is eligible for election as a member of the Legislative Council, except that members of the Legislative Assembly are debarred. Membership of the Council is rendered void by the acceptance of any office of profit under the Crown, or of any pension from the Crown; but persons in receipt of pay, half pay, or pension by virtue of service in the Defence Forces, or office of profit in those services, together with holders of certain offices (including the office of Vice-President of the Executive Council) created by Act of Parliament as an office of the Executive Government, remain eligible for membership. The seats of members are rendered vacant by death, resignation, absence, acceptance of foreign allegiance, bankruptcy, acceptance of public contracts, or by criminal conviction. Each candidate for election must signify his consent to nomination and his nomination paper must be signed by two "electors"; an "elector" may sign only one nomination paper.

In the election of the first House of sixty members, four separate ballots were taken, and in each fifteen members were elected, the term of service being twelve years in the case of the fifteen first elected, and nine, six and three years respectively for each successive group. A group of fifteen members is elected every third year during the six months immediately preceding the retirement of the fifteen members whose term of service is about to expire. Members elected to fill casual vacancies serve only for the unexpired period of the term of the vacant seat. Elections to fill the fifteen seats which became vacant on 22nd April, 1937, and at triennial intervals thereafter, were held on 8th December, 1936, 1st November, 1939, 18th December, 1942, and 14th March, 1946.

The presence of one-fourth of the members, exclusive of the President, is necessary to form a quorum. The Legislative Councillors are required to choose a President from amongst their number. He ceases to hold office if he ceases to be a member of the Legislative Council, and may be removed from office by a vote of the Chamber, or he may resign his office. He receives a salary of £1,200 per annum. There is also a Chairman of Committees to whom a salary of £700 per annum is paid. Members of the Legislative Council are supplied with free passes on the State railways, tramways and omnibuses during membership.

In the case of disagreement between the Legislative Assembly and the Legislative Council in respect of money bills, the constitutional provisions of 1933 preserve the traditional right of the Legislative Assembly to control the purse. Bills relating to appropriations for annual services may be presented for Royal Assent with or without any amendment suggested by the Council, and may become Acts notwithstanding the failure of the Upper House to agree to them; but any provisions in any such Act dealing with any matter other than the appropriation may not become law.

To overcome disagreements in regard to bills (other than such Appropriation Bills) passed by the Legislative Assembly it is provided that the Legislative Assembly may pass the bill again after an interval of three

months. If the Legislative Council rejects it again (or makes amendments unacceptable to the Legislative Assembly) and if a conference of managers appointed by the two Houses and a joint sitting of the two Houses fails to attain agreement, the Legislative Assembly may direct that the bill be submitted to a referendum of the electors. If approved by a majority of electors, the bill becomes law.

*The Legislative Assembly.*

The Legislative Assembly is the elective or popular House of Parliament, and is the most important factor in the government of the State. All bills appropriating any part of the public revenue, or for imposing any new rate, tax or impost, must originate in the Assembly, and by its power over Supply it ultimately controls the Executive. It consists of ninety members elected on a system of universal adult suffrage for a maximum period of three years. Any person who is enrolled as an elector of the State is eligible to be elected to the Legislative Assembly, except persons who are members of the Federal Legislature or of the Legislative Council, or who hold non-political offices of profit under the Crown, other than in the army or navy; but any officer of the public service of New South Wales may be elected to the Legislative Assembly on condition that he forthwith resign his position in the service. All legal impediments to the election of women to the Legislative Assembly were removed in 1918. Several women have since contested seats at the elections; the first to be elected sat in the 28th Parliament, and there are two women in the present Legislative Assembly. The seat of a member becomes vacant in cases similar to those stated above for Legislative Councillors.

A Speaker presides over the House, and his election is the first business when the House meets after election. He presides over debate, maintains order, represents the House officially, communicates its wishes and resolutions, defends its privileges when necessary, and determines its procedure. There is also a Chairman of Committees elected by the House at the beginning of each Parliament; he presides over the deliberations of the House in Committee of the Whole, and acts as Deputy-Speaker.

Payment of members of the Legislative Assembly was introduced as from 21st September, 1889. The amount was fixed originally at £300 per annum. Subsequent changes are shown below:—

TABLE 17.—Payment to Members of the Legislative Assembly.

Date of Change.	Amount per annum.	Date of Change.	Amount per annum.
	£		£
September, 1889 ... ..	300	April, 1930 ... ..	744
September, 1912 ... ..	500	August, 1931 ... ..	706
November, 1920 ... ..	870	December, 1932 ... ..	670
July, 1922 ... ..	600	July, 1938 ... ..	875
July, 1925 ... ..	875		

Each member receives an official postage stamp allowance of £30 per annum and a free pass on State railways, tramways, and omnibuses. The salary of the Speaker is £1,675, and of the Chairman of Committees £1,115 per annum. The leader of the Opposition receives an annual allowance of £250 in addition to his allowance as member.



*Members of Legislative Assembly Pensions.*

A provident fund for members of the Legislative Assembly was established in terms of an Act passed in May, 1946. Members contribute at the rate of £78 per annum. Eligibility for pension depends upon length of service as member before or after the commencement of the Act.

Upon ceasing to be member after 1st May, 1946, pension is payable at the rate of £6 a week to those who have served for an aggregate period of at least fifteen years, or at the rate of £5 a week to those who have served in three Parliaments (not necessarily for the full period thereof). An ex-member is not entitled to pension under the latter qualification if he does not become a candidate for the next ensuing election, unless he satisfies the managing trustees of the fund that there were good and sufficient reasons for his failure to do so.

Pension at the rate of £3 a week is payable to the widow upon the death of a member entitled to pension or of a pensioner (unless he married whilst in receipt of pension). The widow's right to pension ceases if she marries.

When a person ceases to be member and is not entitled to pension, his contributions are refunded to him or to his widow. If the ex-member subsequently becomes a member, he (or in the event of his death whilst member, his widow) will not be entitled to pension unless the amount of any such refund had been repaid to the fund within a prescribed time.

If a pensioner accepts office of profit under the Crown or becomes a member of the Parliament of the Commonwealth or any State his right to pension is suspended during the term of such office or membership.

The provident fund is controlled by the Under Secretary of the Treasury, as custodian trustee, and not more than six members appointed by the Assembly as managing trustees. Any deficiency in the Fund is payable from the Consolidated Revenue Fund.

## STATE PARLIAMENTARY COMMITTEES.

A number of committees consisting of members of Parliament is appointed to deal with special matters connected with the business of the State and of either House; from time to time select committees are chosen to inquire into and report on specific matters for the information of Parliament and the public. Each House elects a committee to deal with its Standing Orders and with printing, and a joint committee to supervise the library. In addition there are the more important committees described below.

*Committees of Supply and of Ways and Means.*

These committees consist by custom of the whole of the members of the Legislative Assembly, and they deal with all money matters. The Committee of Supply debates and determines the nature and amount of the expenditure, and the Committee of Ways and Means debates and authorises the issue of the sums from the Consolidated Revenue Fund and frames the resolutions on which taxing proposals are based.

*Parliamentary Standing Committee on Public Works.*

The Public Works Act, 1912 and amendments provide for the constitution of a joint committee of members of the Legislative Council and Legislative Assembly, called the Parliamentary Standing Committee on Public Works, to be elected by ballot in every Parliament. Three of the persons to be elected must be members of the Legislative Council and four must be members of the Legislative Assembly.

The Act prescribes that proposals submitted to Parliament for public works of an estimated cost exceeding £20,000 (except necessary repairs and alteration of existing railway lines and works of water supply, sewerage and drainage) must be referred to the Committee for report.

The Committee has not been constituted since the commencement of the Parliament elected in 1930, and various public works have been excluded from this provision of the Public Works Act by the Acts authorising their construction.

#### *Public Accounts Committee.*

For the better supervision of the financial business of the State a Public Accounts Committee is elected by the Legislative Assembly in every Parliament, under provisions of the Audit Act, 1902, from among the members of the House, other than Ministers. It consists of five members, and is clothed with powers of inquiry into questions arising in connection with the public accounts and upon all expenditure by a Minister of the Crown made without Parliamentary sanction. It reports on such matters to the Legislative Assembly.

#### COURT OF DISPUTED RETURNS.

The Parliamentary Electorates and Elections Act provides for the establishment of a Court of Disputed Returns—a jurisdiction conferred on the Supreme Court. The business of the Court is to inquire into and determine matters connected with election petitions and questions referred to it by the Legislative Assembly concerning the validity of any election or the return of any member, and questions involving the qualifications of members. The law in this respect has been made applicable to disputed elections of the Legislative Council.

Decisions of the Court are final, but must be reported to the House.

#### COMMISSIONS AND TRUSTS.

In addition to the Ministerial Departments, various public services are administered by Commissions, Boards, and Trusts; the more important are:—

- Aborigines Welfare Board.
- Board of Fire Commissioners of New South Wales.
- Commissioner for Main Roads.
- Commissioner for Railways.
- Commissioner for Road Transport and Tramways.
- Commissioner of Police.
- Electoral Commissioner.
- Electricity Authority of New South Wales.
- Forestry Commission.
- Hospitals Commission.
- Housing Commission.
- Hunter District Water Board.
- Industrial Commission.
- Maritime Services Board.
- Metropolitan Meat Industry Commissioner.
- Metropolitan Water, Sewerage and Drainage Board.
- Milk Board.
- Prickly Pear Destruction Commission.
- Public Service Board.
- Public Trustee.

State Superannuation Board.

Water Conservation and Irrigation Commission.

Western Lands Commissioner.

Workers' Compensation Commission.

In each case the authority controls a specific service, and administers the statute law in relation to it, subject to a limited degree of supervision by a Minister.

*Auditor-General.*

The Auditor-General is appointed by the Governor, and holds office during good behaviour. In certain cases he may be suspended by the Governor, but he is removable from office only on an address from both Houses of Parliament. He is required to take an oath that he will faithfully perform his duties, and he is debarred from entering political life. He is endowed with wide powers of supervision, inspection and audit in regard to the collection and expenditure of public moneys and the manner in which the public accounts are kept. He exercises control over the issue of public moneys, and all warrants must be countersigned by him. Matters connected with the public accounts are subject to special or annual report to Parliament by him, and he may refer any matter to the Public Accounts Committee.

*Agent-General in London.*

The State of New South Wales maintains an Agent-General's Office in London; it is located at Wellington House, The Strand. As official representative it is the duty of the Agent-General to work in close co-operation with the High Commissioner for Australia to keep the Government informed of political and economic developments overseas, to promote trade with the United Kingdom and other countries, and generally to act as the agent of the State in London.

STATE ELECTORAL SYSTEM.

The electoral system is controlled by the Electoral Commissioner—who is charged with the administration of the Act and legal provisions relating to the registration or enrolment of electors, the preparation of rolls and the conduct of elections of the Legislative Assembly and of referenda under the Constitution Amendment (Legislative Council) Act. The Electoral Commissioner holds office for seven years and is eligible for reappointment. He may be removed from office only by resolution of both Houses of Parliament or through performing some disqualifying action laid down in the law.

*Franchise.*

The elections of members of the Legislative Assembly are conducted by secret ballot. Adult British subjects, men and women, are qualified for enrolment as electors when they have resided in the Commonwealth for a period of six months, in the State for three months, and in any subdivision of an electoral district for one month preceding the date of claim for enrolment.

By amending legislation, members and discharged members of the fighting forces, including those under 21 years of age who had served outside Australia, and adult members of the Civil Constructional Corps, if British subjects, serving on projects outside Australia were entitled to vote, though not enrolled, at the general election of 1944.

Persons are disqualified from voting who are of unsound mind or who have been convicted and are under sentence for an offence punishable in any part of the British Empire by imprisonment for one year or longer.

Each elector is entitled to one vote only. Compulsory enrolment was introduced in 1921, and compulsory voting came into force at the elections of 1930. Joint electoral rolls are compiled for State and Federal purposes.

#### *Electorates and Electors.*

The electoral law provides that electorates are to be redistributed whenever directed by the Governor. In the event of there being no direction by the Governor, a distribution must take place after the expiration of nine years from the date of the last redistribution. The redistribution is made by a special commission of three persons, viz., the Electoral Commissioner, the Government Statistician, and the Surveyor-General. A redistribution was made in 1940.

For the purposes of the distribution it is prescribed by the Parliamentary Electorates and Elections (Amendment) Act of 1928 that the State must be divided into three parts, viz., the Sydney area, to which 43 seats are allotted, the Newcastle area 5 seats, and the country area 42 seats. Separate quotas of electors are determined for each area by dividing the total number of electors in the area by the number of seats. The number of electors in each electoral district at a redistribution must be within 1,200 of the quota.

The following table shows certain particulars as to representation in the Parliament of New South Wales in each year in which elections have been held since 1913. Similar information covering the period 1856 to 1916 was published in the 1931-32 edition of this Year Book at page 26:—

TABLE 18.—Parliamentary Representation in New South Wales,  
1913 to 1944.

Year of Elections.	Number of Members of Legislative Assembly.	Population per Member.	Proportion of persons enrolled to Total Population.	Total Number of Electors qualified to Vote.	Average number of Electors per Member.
			per cent.		
1913	90	20,500	55.1	1,037,999	11,533
1917	90	21,000	58.5	1,109,830	12,331
1920	90	22,800	56.1	1,154,437	12,827
1922	90	23,950	58.0	1,251,023	13,900
1925	90	25,500	58.3	1,339,080	14,879
1927	90	26,700	58.6	1,409,493	15,661
1930	90	28,100	57.4	1,440,785	16,008
1932	90	28,700	56.8	1,465,008	16,278
1935	90	29,350	57.9	1,528,713	16,986
1938	90	30,200	59.2	1,607,833	17,865
1941	90	31,100	60.3	1,684,781	18,720
1944	90	32,000	60.4	1,732,706*	19,252

\* Exclusive of members of the forces eligible to vote though not enrolled.

Women voted for the first time in 1904, and since that year practically the whole of the adult population has been qualified to vote.

A member of the Legislative Assembly of New South Wales is elected for each of the ninety electorates by a system of preferential voting. Voters must number the candidates in order of preference on the ballot-paper, and

votes are informal unless preferences have been duly expressed for all candidates. In counting votes, the candidate is elected who has secured an absolute majority of votes either of first preferences outright, or of first preferences plus votes transferred to him in due order of preference by excluding in turn candidates with the lowest number of votes and re-allotting their votes according to the next preference indicated.

The following table shows the voting at the general elections of members of the Legislative Assembly of New South Wales in 1930 and later years. In the 1930-31 issue of the Year Book similar particulars are shown regarding each election since 1894, when a system based on single electorates and the principle of "one man one vote" was introduced. The number of electors as stated represents the number qualified to vote:—

TABLE 19.—Voting at General Elections—Legislative Assembly of New South Wales.

Year of Election.		Electors Enrolled (Whole State).	Contested Electorates.				
			Electors Enrolled.	Votes Recorded.		Informal Votes.	
				Number.	Percentage.	Number.	Percentage
1930	Men ...	724,471	717,999	682,747	95·1		
	Women ...	716,314	710,649	673,676	94·8		
	Total ...	1,440,785	1,428,648	1,356,423	94·9	30,428*	2·24*
1932	Men ...	739,009	715,661	690,094	96·4		
	Women ...	725,999	702,480	676,993	96·4		
	Total ...	1,465,008	1,418,141	1,367,087	96·4	30,260	2·21
1935	Men ...	769,220	679,388	654,383	96·1		
	Women ...	759,493	668,496	640,369	95·6		
	Total ...	1,528,713	1,347,884	1,294,752	95·8	39,333	3·04*
1938	Men ...	803,517	633,079	608,727	96·1		
	Women ...	804,316	635,901	606,767	95·4		
	Total ...	1,607,833	1,268,980	1,215,494	95·8	32,237	2·65
1941	Men ...	834,752	767,170	698,100	91·0		
	Women ...	850,029	773,804	727,652	94·0		
	Total ...	1,684,781	1,540,974	1,425,752	92·5	35,858	2·52
1944	Men ...	833,300	686,479	610,904	*†		
	Women ...	899,406	746,687	699,368	*†		
	Total ...	1,732,706	1,433,166	1,310,272	*†	43,329	3·31

\* Revised. † Votes recorded include those of members of the services who were not enrolled.

Under war conditions many electors were engaged on war and defence duties, which entailed prolonged absence from their districts. The votes recorded in 1944 included 54,332 votes by members of the Forces; some of these voters were not enrolled as electors.

At general elections polling is conducted on the same day in all electorates. Polling-day is a public holiday from noon, and the hotels are closed during the hours of polling.

Electors absent from their sub-divisions are permitted to record their votes at any polling-place in the State, such votes being designated "absent

votes." Postal voting is provided for persons who are precluded from attendance at any polling-place by reason of illness or infirmity, being distant over 5 miles, or travelling.

An elector, who is not enrolled or whose name has been marked as having voted, may in certain circumstances vote after making a declaration that he has not already voted. Votes recorded under this provision are known as "section votes."

The appended table shows the extent to which the franchise has been exercised by absentee and other voters at general elections in recent years.

TABLE 20.—General Elections—Legislative Assembly of N.S.W.—  
Absentee and Postal Votes.

Votes Recorded. (Contested Electorates.)	1932.	1935.	1938.	1941.	1944.
Absent Votes... ..	88,677*	92,572*	98,525*	135,450	94,174
Postal Votes ... ..	19,756*	19,644*	21,069	20,749	27,285
'Section' Votes ... ..	3,541*	2,975	1,937	3,294	2,859
All Votes ... ..	1,367,087	1,294,752	1,215,494	1,425,752	1,310,272

\* Revised.

### *State Parliaments.*

A list of the Parliaments from 1889, when payment of members was instituted, up to December, 1913, was published in the 1931-32 issue of this Year Book. A list of Parliaments since 1913 is appended.

TABLE 21.—Parliaments of New South Wales since 1913.

Number of Parliament.	Return of Writs.	Date of Opening.	Date of Dissolution.	Duration.			Number of Sessions.
23	23 and 29 Dec., 1913* ... ..	23 Dec., 1913...	21 Feb., 1917...	yrs	mths.	dys.	5
24	10, 16, and 23 April, 1917* ...	17 April, 1917...	18 Feb., 1920...	2	10	8	4
25	21 April, 1920...	27 April, 1920...	17 Feb., 1922...	1	9	27	3
26	19 April, 1922...	26 April, 1922...	18 April, 1925†	3	0	0	5
27	20 June, 1925...	24 June, 1925...	7 Sept., 1927...	2	2	18	5
28	29 Oct., 1927...	3 Nov., 1927...	18 Sept., 1930...	2	10	20	4
29	21 Nov., 1930...	25 Nov., 1930...	13 May, 1932...	1	5	27	1
30	30 June, 1932...	23 June, 1932...	12 April, 1935...	2	9	12	4
31	10 June, 1935...	12 June, 1935...	24 Feb., 1938...	2	8	14	4
32	26 April, 1938...	12 April, 1938...	18 April, 1941...	2	11	23	3
33	17 June, 1941...	28 May, 1941...	24 April, 1944...	2	10	8	4
34	22 June, 1944...	22 June, 1944...	29 March, 1947...	2	9	8	5
35	27 May, 1947...	28 May, 1947...	.....	.....	.....	.....	...

\* Under system of second ballot, where no candidate received an absolute majority of votes at first ballot.

† Expired by effluxion of time.

The normal duration of Parliament is three years. Unless previously dissolved Parliament expires by effluxion of time three years after the day prior to the original date of the return of the writs.

On account of war conditions and the disturbed state of public affairs, the Legislative Assembly Continuance Act, 1916, was passed to provide for an extension of the term of the 23rd Parliament to four years. The Parliament, however, terminated after three years and sixty days.

### *State Ministries.*

The various Ministries which have held office since 1913, together with the duration in office of each, are shown below. The life of a Ministry is not co-terminous with the life of a Parliament. Since 1856, when the present system was inaugurated, there have been fifty-three Ministries, but only thirty-five Parliaments. Up to 29th June, 1913, thirty-four Ministries had held office.

TABLE 22.—Ministries of New South Wales since 1913.

Number.	Ministry.				In Office.	
	Name of Premier and Party.				From—	To—
35	Holman (Labour) ...	...	...	...	30 June, 1913	15 Nov., 1916
36	Holman (National) ...	...	...	...	15 Nov., 1916	13 April, 1920
37	Storey (Labour) ...	...	...	...	13 April, 1920	10 Oct., 1921
38	Dooley (Labour) ...	...	...	...	10 Oct., 1921	20 Dec., 1921
39	Fuller (National) ...	...	...	...	20 Dec., 1921	20 Dec., 1921
40	Dooley (Labour) ...	...	...	...	20 Dec., 1921	13 April, 1922
41	Fuller (National)* ...	...	...	...	13 April, 1922	17 June, 1925
42	Lang (Labour) ...	...	...	...	17 June, 1925	26 May, 1927
43	Lang (Labour)† ...	...	...	...	27 May, 1927	18 Oct., 1927
44	Bavin (National)* ...	...	...	...	18 Oct., 1927	3 Nov., 1930
45	Lang (Labour) ...	...	...	...	4 Nov., 1930	13 May, 1932
46	Stevens (National)* ...	...	...	...	16 May, 1932	11 Feb., 1935
47	Stevens (United Aust.)*† ...	...	...	...	11 Feb., 1935	13 April, 1938
48	Stevens (United Aust.)* ...	...	...	...	13 April, 1938	5 Aug., 1939
49	Mair (United Aust.)* ...	...	...	...	5 Aug., 1939	16 May, 1941
50	McKell (Labour) ...	...	...	...	16 May, 1941	8 June, 1944
51	McKell (Labour) ...	...	...	...	8 June, 1944	6 Feb., 1947
52	McGirr (Labour) ...	...	...	...	6 Feb., 1947	19 May, 1947
53	McGirr (Labour) ...	...	...	...	19 May, 1947	‡

\* And Country Party.

† Reconstruction.

‡ In Office.



## COST OF STATE PARLIAMENTARY GOVERNMENT.

The following statement shows the annual cost of State Parliamentary Government in New South Wales. Expenses of Federal and local government are not included:—

TABLE 23.—Cost of State Parliamentary Government.

Head of Expenditure.	1925-26.	1935-36.	1943-44.	1944-45.	1945-46.
	£	£	£	£	£
Governor—					
Salary ... ..	5,000	\$4,259	5,000	5,000	2,500
Salaries, etc., of Staff ... ..	4,028	2,720	4,865	4,823	4,875
Other expenses ... ..	1,945	3,554	2,740	3,354	9,302
	10,973	10,533	12,605	13,177	16,677
Ministry and Executive Council—					
Salaries of Ministers ... ..	23,420	16,924	23,420	23,420	21,629
Other ... ..	1,981	6,740	787	2,884	2,944
	25,401	23,664	24,207	26,304	24,573
Parliament—					
Legislative Council—					
Salaries of President and Chairman of Committees ... ..	1,900	1,511	2,050	2,050	2,013
Legislative Assembly—					
Salaries of Speaker and Chairman of Committees ... ..	2,790	2,056	2,613	2,790	2,790
Allowances to Members* ... ..	67,417	52,392	68,992	69,334	69,050
Postage for Members... ..	2,700	2,699	3,357	3,371	3,374
Railway passes for Members ... ..	33,368	29,313	30,470	30,890	30,390
Both Houses—Joint expenditure—					
Standing Committee on Public Works—					
Remuneration of Members ... ..	3,966	...	...	...	...
Salaries of Staff and contingencies	2,145	592	773	771	626
Salaries of Reporting Staff ... ..	8,269	7,470	8,727	8,966	9,207
Library—Salaries of Staff ... ..	2,541	2,622	3,061	3,046	3,754
Contingencies ... ..	942	511	1,328	1,393	1,776
Other Salaries of Staff ... ..	23,516	22,107	31,213	31,344	33,618
Printing—Hansard ... ..	6,189	4,741	3,314	4,823	5,892
Other ... ..	13,562	9,487	5,438	5,645	8,394
Other Expenses ... ..	5,478	7,413	10,766	11,519	11,790
	174,783	143,314	173,002	175,942	182,674
Electoral—					
Salaries ... ..	2,104	2,100	2,559	3,577	2,306
Contingencies ... ..	8,195	3,182	40,216	6,392	9,493
	10,299	5,282	42,775	9,969	11,799
Royal Commissions and Select Committees	7,790	7,110	...	...	4,669
Grand Total ... ..	229,246	189,903	252,589	225,392	240,392
Per head of population ... ..	1s. 11.7d.	1s. 5.1d.	1s. 9.3d.	1s. 6.8d.	1s. 7.8d.

\* Excluding salaries of Ministers, Speaker, and Chairman of Committees. § Governor, £2,796; Lieut. Governor, £1,463.

In the case of some items of expenditure included above there is not a clear line of demarcation between costs incurred in respect of parliamentary government and the costs of ordinary administration. This applies particularly to the salaries and expenses of ministers of the Crown who fill dual roles as administrative heads and parliamentary representatives, and to the cost of Royal Commissions, which, in many cases, are partly administrative inquiries. In the absence of any means of dissecting the expenditure of this nature these items have been treated as incidental to the system of parliamentary government. On the other hand such factors as the costs of ministerial motor cars and the salaries of ministers' private secretaries are omitted from account as appertaining mainly to administration.

The foregoing statement does not, however, represent the total cost of parliamentary government in New South Wales, because it excludes the cost of the Commonwealth Government. This amounted to £664,042 in 1943-44, £678,542 in 1944-45, and to £607,983 in 1945-46, equal to 1s. 9.9d., 1s. 10.2d., and 1s. 7.6d. per head of population in Australia in the respective years.

### THE COMMONWEALTH.

The federation of the six Australian States was inaugurated formally on 1st January, 1901, for their mutual benefit in matters upon which it was agreed that joint action was desirable. A detailed account of the inauguration of Federation and the nature and functions of the Federal Parliament in their relation to the State was published in the Year Book for 1921 at pages 38-40 and 625.

The seat of Federal Government is Canberra. The site was ceded to the Commonwealth by New South Wales, in terms of the Constitution Act of the Commonwealth, which prescribes that the Australian Capital City shall be located in this State. The Federal Parliament commenced regular sittings at Canberra on 9th May, 1927.

The broad principles of federation were: The transfer of limited and defined powers of legislation to a Federal Parliament consisting of a Senate and a House of Representatives, the former being a revisory chamber wherein the States are equally represented, and the latter, the principal chamber, consisting of members elected from the States in proportion to their population; complete freedom of action for the State Parliaments in their own sphere; a High Court to determine the validity of legislation; and an effective method of amending the constitution. State laws remain operative in all spheres until superseded by laws passed by the Federal Parliament in the exercise of its assigned powers. State laws, however, are invalid only to the extent of their inconsistency with valid federal enactments.

For some time after its inauguration the powers of the Commonwealth were exercised exclusively in respect of internal affairs and the Imperial Parliament remained legally omnipotent, especially in such matters as external defence and foreign relations in peace and war. Gradually, however, Australia, in common with other Dominions of the British Empire, gained national status through understandings and conventions, and developed into self governing and self supporting members of the British Commonwealth of Nations. At the conclusion of the war of 1914-18, Australia was a signatory to the Treaty of Versailles and in 1920 became a member State of the League of Nations. Its representative attended the

League Assembly under sole authority of the Commonwealth Government, without intervention by the Imperial Parliament or powers from the King in his Imperial capacity. Moreover, treaties concluded by the United Kingdom Government affecting Australia became subject to ratification by the Parliament of the Commonwealth.

Imperial conferences attended by representatives of the governments of Great Britain and various parts of the Empire have been held from time to time for discussion of matters of common interest. These conferences have no constitutional powers, but facilitate agreements which subsequently may be ratified by the Parliaments of the political units affected.

At the Imperial Conference in 1926 it was affirmed in respect of the United Kingdom and the Dominions of Australia, Canada, New Zealand and South Africa that "they are autonomous communities within the British Empire, equal in status, in no way subordinate to one another, in any aspect of their domestic or external affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations."

By the Statute of Westminster, 1931, passed by the Imperial Parliament with the concurrence of the Dominions, provision was made for the removal of all restrictions upon the legislative autonomy of the Dominions. As regards Australia, certain sections reserved for adoption by the Parliament of the Commonwealth, became operative as from 3rd September, 1939, in terms of the Statute of Westminster Adoption Act, 1942, assented to 9th October, 1942.

In accordance with its national status, Australia maintains legations in a number of foreign countries and engages in diplomatic exchanges and treaty negotiations independently of the Imperial Government.

#### *Extension of Commonwealth Powers Since 1939.*

By the Constitution of the Commonwealth, the Federal Parliament is vested with power to make laws "for the naval and military defence of the Commonwealth and of the several States." In times of war the Parliament may enact any measure necessary for the prosecution of the war, but in peace its powers contract within normal limits, as defined by the Constitution.

Upon the outbreak of war in September, 1939, the National Security Act was passed to authorise the Commonwealth Government to take necessary steps for the public safety and the defence of the Commonwealth and its territories, and a vast system of controls was built up by means of regulations under the Act.

In view of the temporary nature of the National Security Act, which would expire on the termination of the war, a Conference of Premiers and Leaders of the Opposition in Commonwealth and State Parliaments was held in November, 1942, to discuss the matter of amending constitutional powers to enable the Commonwealth to cope with problems of post-war reconstruction. It was resolved that the States would refer certain powers to the Commonwealth for a period of five years after the war. But the resolution proved ineffective because requisite legislation was passed in agreed form in only two States, viz., New South Wales and Queensland.

Subsequently a proposal of similar nature was submitted by referendum on 19th August, 1944 to the electors of the Commonwealth and was rejected by a majority of voters. (Particulars are shown on page 40.)

Further referendums were taken two years later, on 28th September, 1946, on three proposals for extension of Commonwealth powers. The object of one proposal was to remove doubt as to the validity of certain Commonwealth social services, this was approved. The other proposals relating to (1) organised marketing of primary products and (2) employment in industry were rejected. (See page 41.)

In April, 1946, it was provided by amendment of the National Security Act, 1939-1943, that 31st December, 1946, would be the date of termination of the Act and all regulations made thereunder. It was deemed necessary, however, to continue during the period of transition from war to peace many controls introduced while the Act was in operation, and with this end in view, the State Premiers in conference with Commonwealth Ministers agreed to refer powers to the Commonwealth or, if necessary, to pass legislation complementary to Commonwealth laws. Relying upon its defence powers, the Commonwealth Parliament passed the Defence (Transitional Provisions) Act in December, 1946, to continue in operation till the end of 1947 many of the regulations. Important amongst these were regulations for the control of prices, capital issues, real estate transactions and rationing of commodities and acquisition and disposal of primary products. A complementary measure, the Economic Stability and War Time Provisions Continuance Act, 1946, was enacted by the Parliament of New South Wales.

#### *Commonwealth Legislature.*

The Parliament of the Commonwealth consists of the King (represented by the Governor-General), the Senate and the House of Representatives.

The Senate consists of 36 members, six being elected in each State.

It is prescribed by the Constitution Act that the number of members in the House of Representatives shall be as nearly as practicable twice the number of senators. The number to be elected in each State is determined in the following manner: A quota is ascertained by dividing the number of people of the Commonwealth by twice the number of senators, then the number of people of each State is divided by the quota. The result indicates the number of representatives for each State, one more member being chosen if on the division there is a remainder greater than one-half of the quota. It is provided also that at least five members shall be elected in each original State. The representation of the States may be adjusted in every fifth year.

The number of representatives elected from the various States to the House of Representatives in 1937, 1940, 1943, and 1946 was as follows:—New South Wales, 28; Victoria, 20; Queensland, 10; South Australia, 6; Western Australia, 5; Tasmania, 5. In addition, one representative of the Northern Territory is elected; he may attend and participate in debates but may not vote except on a motion for the disallowance of any ordinance of the Northern Territory or on an amendment of any such motion.

For the purpose of electing representatives to the Senate of the Federal Parliament, each State is treated as one constituency, and returns six members for a term of six years; three senators retire every third year. The members of the House of Representatives are elected by universal adult suffrage for a period of three years from single-member constituencies. The system of voting is preferential, and the electoral system is similar to that of New South Wales. Compulsory voting was introduced in 1924. In

terms of the Commonwealth Electoral (War-time) Act, 1943, the franchise was extended for the duration of the war and for six months thereafter to members of the forces under the age of 21 years who were serving or had served outside Australia.

The voting at elections of members of the House of Representatives from New South Wales since 1913 is shown below.

TABLE 24.—General Elections—Federal House of Representatives—  
Voting in New South Wales.

Year.	Electors Enrolled (Contested Divisions only).		Votes Recorded.		Percentage of Votes Re- corded to Electors Enrolled.			Informal Votes.	
	Men.	Women.	Men.	Women.	Men.	Women.	Total.	Number.	Proportion per cent.
1913	554,028	482,159	405,152	312,703	73·13	64·85	69·28	22,262	3·10
1914	491,086	429,906	351,172	257,581	71·51	59·92	66·10	14,816	2·43
1917	484,854	447,437	370,618	292,925	76·44	65·47	71·17	19,874	2·98
1919	527,779	508,129	385,614	308,183	73·06	60·65	66·97	26,517	3·82
1922	517,388	498,209	330,362	239,980	63·85	48·17	56·16	25,823	4·53
1925	640,533	627,214	581,678	563,215	90·81	89·80	90·31	21,389	1·87
1928	584,545	576,857	547,095	534,817	93·59	92·71	93·16	52,229	4·83
1929	624,068	614,550	591,438	583,007	94·77	94·87	94·82	33,158	2·82
1931	722,480	710,672	689,905	671,786	95·49	94·53	95·01	48,824	3·59
1934	771,456	759,973	730,222	728,090	95·82	95·80	95·81	48,801	3·33
1937	744,004	742,827	720,032	717,384	96·78	96·57	96·68	33,052	2·30
1940	832,280	834,776	779,568	796,381	93·67	95·40	94·43	46,193	2·93
1943*	811,597	870,679	804,314	819,729	*	*	*	49,704	3·06
1946*	902,533	956,261	856,688	891,462	*	*	*	43,107	2·45

\* Votes recorded include votes of some members of the Fighting Services not enrolled as electors.

At the Senate elections of 28th September, 1946, the total number of votes cast in New South Wales was 1,757,150 of which 132,543 or 7·54 per cent. were informal. The number of electors enrolled was 1,858,794, viz., 902,533 men and 956,261 women; and a number of persons was entitled to vote in terms of the War-time Amending Act of 1943, though not enrolled.

#### FEDERAL REFERENDUMS, 1944 AND 1946.

For alteration of the Constitution of the Commonwealth a proposed law must be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives and must be approved by a majority of electors voting in a majority of the States and by a majority of all the electors voting in the Commonwealth.

A proposal for alteration, embodied in the Post-War Reconstruction and Democratic Rights Bill, was submitted to the electors on 19th August, 1944, and was rejected. The purpose of the alteration was to vest in the Commonwealth Parliament for a period of five years power to make laws with respect to a group of fourteen specified matters, viz., (1) re-establishment of members of the fighting forces, (2) employment and unemployment, (3) organised marketing of commodities, (4) companies, (5) trusts, combines and monopolies, (6) profiteering and prices, (7) production and distribution of goods (no such law in respect of primary production to have effect in a State unless approved by that State and no such law to discriminate between States or parts of States), (8) control of over-sea exchange, over-sea investment and regulation of the raising of capital according to plans of the Australian Loan Council, (9) air transport, (10) uniformity of railway gauges, (11) national works (with the consent of

and in co-operation with affected States), (12) national health in co-operation with the States, (13) family allowances, and (14) the people of the aboriginal race. The proposed law provided also (a) that neither the Commonwealth nor a State Parliament might make any law for abridging the freedom of speech or of expression; (b) that the provision of the Federal Constitution to safeguard freedom of religion should apply to every State, and (c) that the Commonwealth Parliament should have opportunity of disallowance of regulations of a legislative character under the proposed laws before such regulations would become operative.

Electors were required to vote for or against the proposed alterations as a whole. Voting was compulsory and members of the fighting forces, irrespective of age, who had served abroad were entitled to vote.

A majority of electors in Australia and in four States (the exceptions being South Australia and Western Australia) voted against the proposal.

On 28th September, 1946, concurrently with general elections, three separate proposals were submitted by referendum to the electors. The first proposal related to the provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so, as to authorise any form of civil conscription), benefits to students, and family allowances, (2) terms of conditions of employment in industry but not so as to authorise any form of industrial conscription, and (3) organised marketing of primary products (notwithstanding anything contained in section 92 which prescribes that trade, commerce and intercourse between the States must be absolutely free).

The proposed amendment relating to social services was approved by a majority of voters in all States and in the Commonwealth and has been embodied in the Constitution. The proposals regarding employment and marketing were rejected; they were favoured by a majority of voters in Australia but in only three States, viz., New South Wales, Victoria and Western Australia.

## DEFENCE.

UPON the inauguration of the Commonwealth the duty of providing for the defence of Australia devolved upon the Federal Government, and the Parliament of the Commonwealth has paramount power to legislate for the naval and military defence of Australia, and for the control of the forces to execute and maintain the federal laws. The Constitution provides that the State may not raise nor maintain forces, but enjoins the Commonwealth to protect every State against invasion, and, on the application of the executive government of the State, against domestic violence. It is provided in the Defence Act that the citizen forces may not be called out nor utilised in connection with an industrial dispute.

*Compulsory Military Training.*

The Defence Act renders male citizens between the ages of 18 and 60 years liable to serve in the citizen forces for home defence in time of war. Male citizens may be required to undergo military or naval training between the ages of twelve and twenty-six years.

The system of compulsory military training was brought into operation in January, 1911, but was suspended in November, 1929, when the citizen forces were re-constituted on the basis of voluntary enlistment. The conditions of enlistment and particulars of the Forces in training under this and the former system were given at pages 34 to 36 of the Year Book, 1939-40.

Compulsory military training was re-introduced soon after war began in 1939. The classes and age groups affected and the periods of training were extended as the gravity of the war situation increased, until, in December, 1941, all trainees then enlisted, with further classes and age groups, were called up for continuous full-time service. The stages by which the strength of the Citizen Military Forces expanded and particulars concerning periods of training and the service required are summarised below:—

TABLE 25.—Compulsory Training, 1939 to 1945.

Date of Proclamation.	Classes and Age Groups Affected.	Period of Training.	Service Required.
<i>Called up for full time compulsory training.</i>			
30-11-39	Unmarried men and widowers without children— Attaining 21 years in 1939-40†	From Jan., 1940— 90 days' camp.	Men serving in C.M.F. at the outbreak or called up during the war liable to serve for duration.
31-7-40	Attaining 20, 22, 23 and 24 years in 1939-40†.	From July, 1940— 70 days' camp and 6 days' home training.	Until 19th Feb., 1943, available for home defence only.
1-12-40	Attaining 19 and 25 to 33 years in 1939-40†.	From Oct., 1941— 180 days' camp (former trainees another 90 days).	
<i>Called up for full time service in C.M.F.</i>			
11-12-41	Unmarried men and widowers without children— All the foregoing and men aged 35 and under 45 years. Married men and widowers with children— Aged 18 and under 35 years.	From Dec., 1941— Full time service for the duration of the war.	From 19th Feb., 1943, available for service in South West Pacific Zone—between 110° E., 159° E. and Equator. Minimum of 3 months (6 months if under 20 years) training before posting to field service. Posting under 19 years restricted after October, 1942.
<i>Required to enlist and serve.</i>			
6-3-42	All men under 60 years of age not called up previously.	Enrolled but not called up to serve.	

† Year ended June.



*Voluntary Enlistment.*

An account of voluntary enlistment for oversea service in the First Australian Imperial Force (1914-18) was given in previous editions of this Year Book.

During the war of 1939-45 only those volunteering to serve in any theatre of war were admitted to the Second Australian Imperial Force (Army), the Royal Australian Navy and the Royal Australian Air Force. The Second Australian Imperial Force consisted of four infantry divisions raised as follows; the Sixth Division in October, 1939, the Seventh Division in April, 1940, the Eighth Division in July, 1940, and the Ninth Division in November, 1940, together with an Armoured Division raised in July, 1941. Except for specialists an upper age limit of 40 years applied throughout. The minimum age of 20 years was reduced to 19 years in July, 1941, and to 18 years in April, 1943, but minors might not be enlisted without the consent of their parents. Men might not be posted to an operational area under the age of 19½ years up to April, 1943, and under 19 years thereafter; before posting at least six months training must have been completed by those attaining the age of 19 years.

Enlistment in the Royal Australian Navy was open to men between the ages of 17 and 45 years and all were available for active service without regard to age. In the Royal Australian Air Force the age limits were 18 years and 35 years, except that men above the age of 35 years might be accepted in cases approved by the Air Board. Air Force personnel were not posted for oversea service before reaching the age of 19 years.

*Women's Services.*

All members of the women's defence services were volunteers. The services comprised the Royal Australian Naval Nursing Service, the Women's Royal Australian Naval Service, the Australian Army Women's Service, the Australian Army Nursing Service, the Australian Army Medical Women's Service (replacing full-time Voluntary Aid Detachments after December, 1942), the Women's Australian Auxiliary Air Force, and the Royal Australian Air Force Nursing Service. Female specialists—medical officers, physio-therapists, assistant pathologists and biologists, occupational therapists and dietitians—were appointed to the Australian Military Forces.

All women in the Navy and Air Force services and some in the military forces were attested for service wherever required, but apart from some nursing personnel and some A.A.W.S. who specially volunteered for service in New Guinea, women were not required to serve outside Australia.

*World War, 1939-1945.*

War with Germany was declared on 3rd September, 1939. The defence forces of Australia were placed on a war footing and voluntary enlistment for naval, military and air forces for oversea service commenced. Provision for military security and for economic organisation for war was made by the National Security Act and implementing regulations. Italy became a belligerent on 10th June, 1940.

Australian naval and air forces engaged in hostilities from the outset. Australian Imperial Forces were sent abroad in 1940 and fought in the defence of Egypt, the Suez Canal and Palestine, and in military campaigns in North Africa, Syria and Lebanon, and Greece and Crete. Air crew enlisted under the Empire Air Training Scheme (commenced in 1940) served in the defence of Britain and elsewhere with the Royal Air Force and in the Royal Australian Air Force.

Japan entered the war on 9th December, 1941. An Australian Division was sent to assist in the defence of Malaya and Singapore and Australian forces serving in the Middle East were returned to Australia to meet threatened Japanese invasion, and served subsequently in New Guinea, Pacific Islands, parts of the Netherlands East Indies, Timor and in Borneo. Troops of the Citizen Military Forces also fought in the South-west Pacific Zone as provided by the amending Defence Act of February, 1943. In defence and re-conquest in the Pacific theatre Australian forces fought from March, 1942, under the Allied Supreme Commander, General Douglas MacArthur (of United States). United States in considerable numbers (and some Dutch) forces were based in Australia during the years 1942 to 1944, and later, when war exigencies elsewhere permitted the British Navy to be deployed in strength against Japan, Sydney became the major Pacific Base for the Royal Navy.

Hostilities ceased in Europe on 8th May, 1945, and ended in the Pacific on 15th August, 1945. A comprehensive account of the campaigns and achievements of the Australian naval, military and air forces and of the part of civilians in the war will be available in the Official History of the war being prepared under the direction of the Commonwealth Government.

From the outbreak of war up to the cessation of hostilities in August, 1945, approximately 993,000 persons, including about 66,000 women served at some time in the armed forces of Australia. Of these approximately 735,000 (including 35,000 women) were available for service in any theatre of war. The greatest number in the armed forces at any one time (633,400) was attained in August, 1943. Gross enlistments from New South Wales were 345,000 men and 24,000 women.

The following statement shows the net enlistments (gross enlistments less discharges and deaths) from New South Wales as at various dates during the war. At the peak in August, 1943, the number of males of New South Wales serving in the forces (258,267) was equal to approximately 50 per cent. of all males aged 18 and under 40 years.

TABLE 26.—Net Enlistments in Australian Armed Forces,  
New South Wales.

Date.	Males.				Females.			
	R.A.N.	Army.	R.A.A.F.	Total.	R.A.N.	Army.	R.A.A.F.	Total.
1939—December ...	4,205	10,652	1,814	16,671	...	48	...	48
1940—December ...	5,830	57,744	10,713	74,287	...	264	11	275
1941—December ...	6,695	140,834	20,976	168,505	45	881	573	1,499
1942—December ...	8,545	201,363	39,112	249,020	309	5,297	5,409	11,015
1943—August ...	10,014	199,990	48,263	258,267	657	9,739	6,393	16,789
December ...	10,217	192,790	50,026	253,933	708	10,123	6,821	17,652
1944—June ...	10,382	182,046	55,790	248,218	770	9,615	7,326	17,711
December ...	10,540	170,324	57,272	238,136	768	9,086	7,198	17,052
1945—September...	11,149	149,561	51,645	212,355	831	8,232	6,276	15,339

In addition to the above, from 1940 onward, part-time volunteer defence forces were organised, equipped and trained. These included the Volunteer Defence Corps (Australia's Home Guard) which at its maximum strength in mid-1942 numbered 98,000 in Australia and approximately 30,000 in New South Wales; Voluntary Aid Detachments (women) and the National Emergency Services. Members of the last-mentioned were trained in air-raid precautions, first aid and fire-fighting. The Volunteer Defence Corps became part of the Australian Military Forces in December, 1941. Its disbandment, commenced in September, 1945, was completed

in June, 1946. A defence boom was built in Sydney Harbour and from January, 1942, until the threat of invasion passed all lights in coastal areas and the immediate hinterland were "dimmed out" under National Security regulations.

#### DEMOBILISATION.

General demobilisation of Australian service personnel began in October, 1945. The number of men in the forces enlisted from New South Wales was reduced from approximately 221,000 in August, 1945, to about 90,000 in March, 1946, and to 24,000 in March, 1947. New South Wales service-women numbered approximately 15,000, 6,500 and 800 in the respective months.

The following statement shows that discharges effected in New South Wales between June, 1945, and June, 1947, numbered 219,226, comprised of 203,357 men and 15,869 women. January, 1946, when 27,539 men and 1,587 women were discharged, was the month of heaviest demobilisation. By far the greater proportion of the men discharged intended to return to their pre-service or some specific occupation, but at the time of discharge about one in every four men was indefinite in regard to future plans. Of the service-women discharged about 30 per cent. intended to return to or to take up home duties, 22 per cent. were returning to former or taking up new occupations, and those whose plans were indefinite represented nearly 30 per cent. of the total.

Particulars of persons demobilised in New South Wales in each month June, 1945, to June, 1946, and in the half-years ended December, 1946, and June, 1947, are shown below. The table includes particulars of the intended post-service occupations as indented by each individual concerned at the time of discharge.

TABLE 27.—Demobilisation of Service Personnel in New South Wales.  
June, 1945, to June, 1947.

Number of Discharges Effected during—	Intended Post-Service Occupation.								
	Males.					Females.			
	Pre-Service or New Occupation.		Taking up Full-time Training.†	Other. (Plans Indefinite.)*	Total Discharges.	Pre-Service or New Occupation.	Taking up Full-time Training.†	Home Duties.	Other. (Plans Indefinite.)*
	As Em- ployer.	As Em- ployee.							
1945—June ...	220	1,180	88	751	2,239	24	12	261	69
July ...	230	1,455	91	1,001	2,777	37	10	264	47
Aug. ...	502	2,718	195	1,623	5,038	29	26	289	77
Sept. ...	791	4,906	431	2,453	8,581	76	44	349	112
Oct. ...	1,654	8,287	294	3,505	13,740	145	47	570	166
Nov. ...	3,429	16,535	151	6,798	26,913	255	33	733	454
Dec. ...	2,099	12,135	197	4,356	18,787	268	73	471	394
1946—Jan. ...	3,245	17,607	495	6,192	27,539	322	164	598	503
Feb. ...	1,786	9,689	523	3,587	15,585	354	150	519	531
Mar. ...	1,900	10,001	286	3,920	16,107	289	92	321	528
Apr. ...	1,338	7,491	247	2,891	11,967	208	49	232	487
May ...	1,166	7,384	143	2,825	11,518	206	30	237	384
June ...	1,029	7,182	48	2,502	10,761	142	13	176	287
July—Dec. ...	2,165	14,889	129	6,818	24,001	800	62	679	1,183
1947—Jan.—June ...	646	3,838	271	3,049	7,804	347	111	150	380
Total. June, 1945, to June, 1947 ...	22,200	125,297	3,589	52,271	203,357	3,502	916	5,849	5,602
									15,869

\* Includes small numbers retiring from gainful occupations and those permanently or temporarily incapacitated. † Full-time training in a civilian occupation selected at time of discharge, others being eligible for training at a later date.

The general plan of demobilisation was explained in a Parliamentary Paper presented on 29th August, 1945. Priority for discharge was determined by length of service, age and family responsibility. A points system indicated the order of dispersal for servicemen; two points were allotted for each year of age upon enlistment and two points (three points for those with dependants) for each month of service. Service-women were demobilised in the following order: women with dependent children, other women married before cessation of hostilities, women with dependants other than children, and other women. Within these four groups priority in discharge was according to the aggregate of one point for each month of service and three points for each year of age at time of enlistment.

Exceptions from the general order of dispersal were made in the cases of men who volunteered for further service, of certified men whose early discharge would accelerate employment opportunities for others, of those accepted for re-construction training, and upon compassionate grounds. Prisoners of war were discharged soon after repatriation and patients under treatment were allotted priorities as they became fit for duty.

The normal demobilisation procedure was (a) medical examination (and Medical Board in appropriate cases), (b) rehabilitation interview, (c) vocational guidance tests where desired, (d) re-establishment action as required and (e) service discharge. A civil re-establishment wing at each dispersal centre dealt with arrangements for employment, war service land settlement, war service (and other) homes, reconstruction training, re-establishment loans, tools of trade or equipment required for re-establishment, banking and other requirements or facilities to meet each case.

Re-employment allowances were provided for a period of three (in certain cases of six) months for ex-service personnel who were unable to obtain suitable employment after discharge. Particulars of these allowances are given in the chapter "Social Condition" of this Year Book.

#### WAR GRATUITY.

The War Gratuity Act, 1945-47 authorises payment of a war gratuity for honourable service during the war (as a free gift not claimable or recoverable as a matter of right) to members (and dependants of deceased members) of the defence forces. Gratuity accrued at the rates per month of 30 days of £3 15s. for oversea service and of 15s. for service in Australia. In calculating the gratuity periods oversea service counted as from 2nd September, 1939, and service in Australia as from 6th December, 1941, or from the completion of six months' service after that date. The periods terminated on the date of discharge (adding any period covered by pay in lieu of leave) or on 30th June, 1947, whichever the earlier.

Oversea service included service in New Guinea, Papua and Norfolk Island after 6th December, 1941; the period whilst prisoner of war; service with an operational squadron involved in flights outside Australia; and a period of not more than 90 days after return to Australia (or after the hospital period if invalided home). Service abroad of less than 90 days continuously, or of less than 180 days in twelve months was not regarded as oversea service. All those credited with oversea service received a minimum of twelve months at the oversea rate.

In cases of members who died and of those reported missing whilst serving, gratuity continued at the then current rate until seven months after the date of notification of death or presumed death. In these cases the

minimum period at the overseas rate was nineteen months. In respect of a member or discharged member whose death between 3rd September, 1939, and 2nd September, 1945, was due to continuous full-time war service, and who at time of death had members of his family totally dependent upon him, a minimum of three years gratuity at the overseas rate was payable irrespective of the place of service.

Those eligible were required to apply for the gratuity. The amounts payable were credited in the War Gratuity Register, except in those cases where the gratuity amounted to less than £10, when payment was effected immediately. Gratuities in the register bear interest at the rate of  $3\frac{1}{2}$  per cent. per annum from the date of credit until 3rd March, 1951, when payment is to be made.

Gratuity and interest thereon are tax free and are not regarded as property or income for purposes of the Invalid and Aged Pensions Act, the Repatriation Act, or the Widows' Pensions Act. A gratuity is inalienable, and non-transferable except where transfer or cash payment to an approved authority is effected in connection with the erection or purchase of a house which is to be the member's residence. Cash payment of gratuity may be made in certain circumstances to a member who is blind or totally incapacitated, to the widow of a member, to the widowed mother of an unmarried deceased member, or to the mother (or sister who acted in loco parentis) who was dependent upon a deceased member.

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## CHRONOLOGICAL TABLE OF EVENTS IN THE HISTORY OF NEW SOUTH WALES.

A brief historical sketch of New South Wales was published in the Official Year Book for 1929-30, at pages 40 to 52, and a chronological table of events in the history of New South Wales from 1770 to 1919 was published in the Official Year Book for 1919, at pages 1 to 8. This table is repeated below in a revised form as from 1901 with a continuation from 1920 to 1947.

- 1901 Federation of Australian Colonies—Interstate free-trade established—Industrial Arbitration Act (State)—Sydney Harbour Trust formed—Closer Settlement Act—Western Lands Act—Introduction of Pacific Islanders prohibited.
- 1902 Mt. Kembla Colliery Explosion (ninety-five lives lost)—Pacific Cable completed—First sitting of New South Wales Arbitration Court—Parliamentary Select Committee *re* Greater Sydney—First Federal Tariff.
- 1903 High Court of Australia inaugurated—Women's Franchise Act.
- 1904 Membership of N.S.W. Legislative Assembly reduced from 125 to 90—Patents, Trade Marks, etc., transferred to Commonwealth—Commonwealth Conciliation and Arbitration Act.
- 1905 Assisted Immigration reintroduced—Children's Courts instituted—Local Government extended to whole State (except Western Division).
- 1906 Public School fees abolished—Sydney Central Railway Station opened.
- 1907 Invalidity and Accident Pensions—Telephone connected, Sydney-Melbourne—Opening of blast furnace for manufacture of iron and steel at Lithgow—Medical inspection of School Children initiated—"Harvester" Wage determined.
- 1908 Visit of United States (American) Fleet—Minimum Wage Act—Industrial Wages Boards constituted—Subventions to Friendly Societies Act—Federal Capital Site selected—Crown Lands Amendment Act (Conversion of Tenures)—Cataract Dam completed—Private Hospitals Act.
- 1909 Fisher Library (Sydney University) opened—Old-age Pensions replaced by Commonwealth system—Pure Food Act.
- 1910 Mitchell Library opened—Referendums, transfer of States Debts to Commonwealth approved; proposed States financial agreement with Commonwealth rejected—Australian silver coinage issued—Saturday Half-holiday instituted in Sydney and the larger towns of N.S.W.—Workmen's Compensation Act—Federal Land Tax—Invalidity and Accident Pensions replaced by Commonwealth Invalid Pensions—Arrival of "Yarra" and "Parramatta," first vessels of Australian Navy—Australian Penny Postage.
- 1911 First Australian Notes issue—Federal Referendums on monopolies and industrial legislation; proposals rejected—Federal Capital Territory transferred to Commonwealth—Compulsory defence training initiated—First wireless station (private) licensed for transaction of public business—Flight of first Australian Aviator (W. E. Hart) from Sydney to Penrith.
- 1912 Bursary Endowment, Secondary Education—Murray Waters Agreement—Irrigation farming commenced, on Murrumbidgee Irrigation Area—Commonwealth Bank (Savings Bank Department) established—Commonwealth Maternity Allowances introduced—Sydney (Pennant Hills) Wireless Station opened.
- 1913 Australian Capital City named Canberra; foundation stones laid—Visit of Dominions Royal Commission—British Trade Commissioner's office established at Sydney—Arrival at Sydney (4th October) of Australian Fleet, including battle cruiser "Australia" and cruisers "Sydney" and "Melbourne"—Departure of (Imperial) Admiral King-Hall—First Cost of Living and Living Wage Inquiry in Industrial Arbitration Court—Appointment of Interstate Commission—Commonwealth Bank commenced general banking business.

- 1914 Norfolk Island transferred to control of Commonwealth Government—First Aerial Mail, Melbourne to Sydney, carried by M. Guillaux—Direct telephone, Sydney to Adelaide, opened—First Baby Clinic opened—State advances for homes initiated—European War—Expeditionary force despatched abroad—Australian Naval Unit placed under Imperial control.
- 1915 Australian Expeditionary Forces in action at Dardanelles and in Egypt—Iron and steel works opened at Newcastle—Conservatorium of Music opened—War census—Commonwealth Income Tax.
- 1916 Australian Expeditionary Forces in action in France—Liquor Referendum hotel closing hour 6 p.m. selected—Fair Rents Court established—Valuation of Land Act—Eight Hours Act (48-hours week)—Military Service Referendum; proposal rejected—Registration of private schools initiated—Workmen's Compensation law—Imperial Wool Purchase Scheme.
- 1917 Transcontinental Railway opened—River Murray Waters Act in operation—Daylight Saving initiated and abandoned—Second Military Service Referendum rejected—Extensive industrial dislocation.
- 1918 European War Armistice declared—N.S.W. Board of Trade constituted—Women's Legal Status Act—Poor Persons Legal Remedies Act—Proportional representation at State Parliamentary elections.
- 1919 Peace Treaty between European Powers—State Housing scheme initiated—Influenza epidemic—Wheat Silos scheme initiated—First aeroplane flight, England to Australia (twenty-eight days) by Sir Ross and Sir Keith Smith—Commonwealth Royal Commission appointed to inquire into basic wage and cost of living—Federal Referendums; proposals to extend legislative powers rejected.
- 1920 Proportional representation and multiple electorates (State Parliament)—Control of Australian Note issue transferred to Board of Directors in Note Issue Department, Commonwealth Bank.
- 1921 Forty-four hour week introduced (State)—Voluntary wheat pool inaugurated—First direct wireless press message, England to Australia.
- 1922 Rural Bank established—Reversion to 48-hour week (State).
- 1923 Agreement to extend certain Victorian Railways into New South Wales.
- 1924 Grafton-Kyogle-South Brisbane Railway Agreement—Migration Agreement with British Government on basis of £34,000,000 loan—Control of Australian Note Issue transferred to Commonwealth Bank Board—Australian Loan Council formed.
- 1925 Main Roads Board established—Sydney Harbour Bridge commenced—Broadcasting stations established—Compulsory voting at Federal elections.
- 1926 First section of City Underground Railway opened—Electrification of suburban railway lines commenced—44-hour week re-introduced—Widows' pensions (N.S.W.) instituted—Workers' Compensation compulsory insurance by employers—Sydney Branch of Royal Mint closed.
- 1927 First sitting of Federal Parliament at Canberra, 9th May—Commercial wireless service with England—Family Endowment instituted in New South Wales—Single seats and preferential voting introduced at State elections—Western railway opened to Broken Hill.
- 1928 Financial Agreement Commonwealth and States—Loan Council reconstituted—Liquor Prohibition proposal rejected at referendum—First flight, United States to Australia, (Kingsford-Smith and Ullm)—Flight, England to Australia (Hinkler) in sixteen days—Visit of British Economic Mission.
- 1929 Protracted disputes in timber and coal-mining industries—Royal Commission on Coal Industry—Compulsory voting at State elections—Suspension of compulsory military training.
- 1930 Wireless telephone service to England—Reversion to 48-hour week (1st July)—Unemployment Relief Tax imposed—Flight, England to Australia (Kingsford-Smith), 10½ days—Acute economic depression—Moratorium Act—Commonwealth Sales tax imposed—Brisbane-Kyogle railway opened.

- 1931 Forty-four hour week restored (1st January)—Government Savings Bank of New South Wales suspended payment, later reopened and amalgamated with Commonwealth Savings Bank—Premiers' Financial Agreement (reduction of expenditure)—Commonwealth Conversion Loan (internal debts £556,000,000)—State Lottery initiated—State Flour "tax" levied—Reduction of interest and rents—Commonwealth Court reduced wages by 10 per cent.
- 1932 Sydney Harbour Bridge opened—Dismissal of State Cabinet by Governor—Imperial Economic Conference at Ottawa—Clarence River bridge opened linking Albury and Brisbane by standard gauge railway—Farmers' Relief Act passed—Industrial Commission reconstituted.
- 1933 Record wheat harvest—World Economic Conference in London—Census, 30th June—Family Endowment Tax abolished.
- 1934 Legislative Council re-constituted—Hume Reservoir completed—Federal Wheat Commission Inquiry—New States Boundaries Commission—Bread Inquiry—Visit of H.R.H. the Duke of Gloucester—England-Australia Air Mail inaugurated.
- 1935 Silver Jubilee of King George V—Visit of Japanese Goodwill Envoy—Sydney County Council (Electricity) formed—State industrial undertakings (brickworks, etc.) sold—Federal Banking Commission of Inquiry appointed.
- 1936 Death of H.M. King George V—Commonwealth imposed import quotas on certain commodities—Abdication of H.M. King Edward VIII and accession of H.M. King George VI.
- 1937 Aviation and Marketing Referendums, proposals rejected—Coronation of H.M. King George VI—Imperial Conference in London—Commonwealth Court's "basic wage" (including prosperity loading) adopted for State awards—Co-operative societies home building scheme initiated.
- 1938 150th Anniversary of foundation of Australia—British Empire Games and Empire Producers' Conference in Sydney—National Health and Pensions Insurance (Commonwealth) Act passed—Empire Air Mail Service commenced—British Commonwealth Relations and Imperial Trade Conferences in London—City of Parramatta proclaimed—Australian Wheat Stabilisation introduced.
- 1939 Defence Measures—National Security Act—National Register and Wealth Census—Commonwealth Arbitration Court adopts 44 hours as standard week—War with Germany (3rd September)—Emergency control of exchange, prices, etc.—Imperial purchase of wool, butter, cheese, meat, eggs, metals, canned and dried fruits—Federal wheat pool—Compulsory school period fixed at 6 to 14 years (Dec.).
- 1940 Australian Expeditionary Forces abroad—Empire Air Training Scheme—Australian Ministers appointed to United States and Japan—General Coal Mining dispute—Stabilisation of prices of Commonwealth Government securities—Co-ordination of public works under Australian Loan Council—Petrol rationing (1st Oct.)—Petrol from Glen Davis shale—Tasman Air Service inaugurated—Compulsory Defence Training—Home Defence (volunteer) force organised—Enemy sea raiders in Australian waters—Commonwealth industrial arbitration powers extended—Trade Union Advisory Panel set up—National Advisory War Council—Newsprint rationed—Building operations restricted—Libraries Act proclaimed.
- 1941 Federal income tax, payment by instalments introduced—Commonwealth Child Endowment replaced New South Wales system—Payroll tax (Federal)—Organisation of man power—Australian Minister appointed to China—Australian News and Information Bureau opened in New York—Youth Welfare Act proclaimed—National Fitness (Federal) Act—School-leaving age to rise by 4 months annually (to 15 years in 1943)—Australian Forces in Malaya—War with Japan (9th December)—Miners' Pensions—Lend-lease agreement Australia and United States of America.
- 1942 Australian Forces in various theatres of war—Unified control of Australian and Allied Forces in South-West Pacific—Enemy air raids on N.S.W. coastal areas—Japanese submarines sunk in Sydney Harbour



- (31st May)—National Register of Civilians—Rationing (by coupons) of clothing, tea, sugar—State taxes, income and entertainments, replaced by uniform Federal taxes. War damage insurance introduced—Zoning of shearing and retail deliveries—Daylight saving (1 hour), 1st January to 28th March, and from 27th September—Commonwealth Widows' Pensions (30th June)—Commonwealth subsidy for dairy industry.
- 1943 Airgraph overseas service inaugurated—National Welfare Fund established—National Civilian Register—Butter rationing (7th June)—Compulsory third party insurance of motor vehicles—Dairying industry wages award—Mortgage Bank Department of Commonwealth Bank opened—Daylight saving, summer months.
- 1944 Referendum on extension of Commonwealth Powers; proposal rejected—Meat rationing by coupons (January)—"Pay as you earn" income taxation introduced—Rural Bank Personal Loans Department opened—British Pacific Fleet headquarters in Sydney.
- 1945 H.R.H. Duke of Gloucester, Governor-General of Australia—Cessation of hostilities, Europe, 8th May; Pacific, 15th August—Captain Cook Dock (Sydney) opened—Annual Holidays Act (N.S.W.) in operation—Occupation Survey of persons aged 14 years and over (June)—Unemployment and Sickness Benefits (Commonwealth) commenced—Federal legislation on Banking and Life Insurance—Wool Marketing Agreement, United Kingdom, Australia, New Zealand, South Africa—Marketing of fish under (State) Government control—Cumberland County Council (town planning) constituted—Peats Ferry (Hawkesbury River) Bridge opened—General demobilisation begun (October)—Workers' Compensation Insurance, Fixed Loss Ratio Scheme adopted.
- 1946 Commonwealth Hospitals Benefit Scheme commenced—Electricity Authority of New South Wales constituted—Wartime control of manpower terminated—Members of Legislative Assembly (N.S.W.) Pensions Scheme commenced—Commonwealth-State agreements ratified; War Service Land Settlement, Housing, Hospital Benefits, Coal Industry—Wool auctions resumed—Day baking of bread introduced—First Australian-born Governor of New South Wales—Australian Airlines (Commonwealth Government) services inaugurated—Oversea Telecommunications Agreement (British Commonwealth and Empire)—Immigration Agreement, United Kingdom and Australia—Basic wages increased (7s. a week) by Commonwealth Court (Interim Judgment)—National Security Act terminated 31st December—Commonwealth and State legislation for continuation of certain controls—Referendums on extension of Commonwealth Powers; social services proposal approved; organised marketing and employment proposals rejected—Double Income Tax relief agreement, United Kingdom and Australia.
- 1947 Coal Industry Commonwealth-State Board appointed—Referendum on Hotel Closing hours, 6 p.m. approved—Hon. W. J. McKell (Premier of N.S.W.) appointed Governor-General of Australia—Commonwealth Tuberculosis Benefits commenced—Forty Hours Week (N.S.W.) legislation—New South Wales—Queensland Border Rivers Agreement ratified—Australian Gift, £25,000,000, to United Kingdom.



## VITAL STATISTICS.

*CENSUS, 30th June, 1947: When this chapter was prepared results of the Census of 30th June, 1947, were not available; consequently rates relative to population herein are calculated on pre-censal estimates of population. Slight revision may be required in such rates in the next issue of this Year Book. The chapter dealing with "population" will be the last part of this edition in order that it may contain data from the Census.*

### REGISTRATION OF BIRTHS, DEATHS, AND MARRIAGES.

CIVIL registration of births, deaths, and marriages was inaugurated in New South Wales in March, 1856, when a general registry was established, and a Registrar-General appointed by the Governor. The law relating to registration is contained in the Registration of Births, Deaths, and Marriages Act, 1899-1944, and those relating to marriage in the Marriage Act, 1899-1934. For registration purposes New South Wales is divided into 125 registry districts, each having a registry office in the charge of a district registrar. Some districts have additional registry offices, each in charge of an assistant district registrar. On 1st January, 1946, there were 198 registry offices.

The births of all children born alive are required to be registered within sixty days of the birth. After the expiration of sixty days a birth cannot be registered unless some person present at the birth, or the parent, makes a statutory declaration within six months of the birth. Prior to 1st April, 1935, no birth could be registered after the expiration of six months, but the amending Act, which came into operation on that date, provides for such registrations upon proper authority being obtained. A child is considered to have been born alive if it has breathed and has been wholly born into the world whether it has had an independent circulation or not. As a general rule, births are registered promptly in order to obtain the benefit of the maternity allowances.

The registration of stillbirths was commenced on 1st April, 1935, and the law requires that registrations be made within 21 days. For purposes of registration a stillborn child is one of seven months gestation or over not born alive, and includes any child not born alive which measures at least fourteen inches, but does not include any child which has actually breathed.

Before interment or cremation, notice of the death of any person must be supplied to the District Registrar by a relation of the deceased, or by the householder or tenant of the house or place in which the death occurs. Such notice must be accompanied by a proper certificate as to the cause of death. When a dead body is found, the death is registered by the coroner or by the nearest Justice of the Peace.

Marriages may be celebrated only by a minister of religion registered for that purpose by the Registrar-General, or by the District Registrar of the district in which the intended wife or man usually resides. In the latter case the parties to be married must sign, before the District Registrar, a declaration that they desire to be married, and affirming the usual place of residence of the intended wife. Marriage of minors is

permissible only with the written consent required by law. Marriage with a deceased wife's sister or a deceased brother's widow is valid in law in New South Wales.

In August, 1946, there were 2,794 persons registered as ministers of religion for the celebration of marriages in New South Wales. The distribution amongst the various denominations is shown below, viz.: 670 belonged to the Church of England, 890 were Roman Catholic, 323 Methodist, 321 Presbyterian, 78 Congregational, 134 Baptist, 91 belonged to the Salvation Army, 106 were Seventh Day Adventists, 48 belonged to the Church of Christ, 17 to the Latter Day Saints, and 14 to the Jewish faith. There were 36 other religious bodies, represented by 102 ministers.

### MARRIAGES.

The following table shows the average annual number of marriages and the crude rates per 1,000 of the population since 1881:—

TABLE 28.—Marriages, 1881 to 1945.

Period.	Average Annual Number of Marriages.	Rate per 1,000 of Population.	Period.	Average Annual Number of Marriages.	Rate per 1,000 of Population.
1881-85	7,147	8.48	1936-40	25,295	9.29
1886-90	7,730	7.46	1941-45	28,505	10.02
1891-95	7,985	6.65			
1896-00	9,093	6.93	1938	24,579	9.03
1901-05	10,435	7.40	1939	25,471	9.27
1906-10	12,745	8.23	1940	30,364	10.95
1911-15	16,745	9.31	1941	29,983	10.74
1916-20	15,756	8.03	1942	34,533	12.25
1921-25	18,041	8.20	1943	26,302	9.26
1926-30	19,253	7.86	1944	26,426	9.20
1931-35	18,742	7.20	1945	25,283	8.72

Marriage rates declined steadily for ten years prior to 1894, when the rate was only 6.25 per 1,000 of population. After that year an improvement, remarkable for its regularity, was experienced, until in 1912 the rate (9.56 per 1,000) was the highest rate recorded to that time. The rate was slightly higher in 1915, due to marriages of soldiers prior to their departure overseas.

There was a sharp decline during the absence of many men of marriageable age, then an exceptional rise after their return from active service, the rate in 1920 being 9.76 per 1,000. During the post-war period the rate was fairly steady at about 8.11 per 1,000 until acute depression set in and it declined to its lowest level, 6.02 per 1,000, in 1931.

Subsequently the rate rose slowly year by year until the early part of 1939 when there was a slackening in the post-depression increase. After the outbreak of war in September, 1939, there was a sudden change, and the number of marriages in the next four months was higher by 1,056 than in September to December, 1938.

In 1940 the number of marriages increased by 4,893 to 30,364 and the high level was maintained in 1941. In the following year there was a further exceptional rise to 34,533 marriages, representing 12.25 per 1,000 of population, and both number and rate far exceeded any previous record. In this

year many Australian troops returned from war service abroad, and a large number of Allied forces arrived in Australia; moreover, prevailing economic conditions of industrial activity and heavy war-time expenditure favoured an increase in marriages. By 1943 the impetus of war-time factors weakened and the number of marriages from 1943 to 1945 was little above the pre-war average.

Marriages of members of Allied forces in New South Wales are included in the years 1942 to 1945.

The following statement shows the marriage rate per 1,000 of the population in each State, the Commonwealth of Australia, and in New Zealand in 1945 compared with the rates of the previous seven years:—

TABLE 29.—Marriage Rates, States, 1938 to 1945.

State or Country.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.
<i>New South Wales...</i>	<i>9.03</i>	<i>9.27</i>	<i>10.95</i>	<i>10.74</i>	<i>12.25</i>	<i>9.26</i>	<i>9.20</i>	<i>8.72</i>
Victoria ... ..	9.16	9.23	11.71	10.79	12.03	9.27	8.94	8.20
Queensland ... ..	8.85	8.98	10.03	9.53	11.29	9.49	10.63	9.18
South Australia ...	9.26	9.51	11.60	11.38	13.31	10.18	9.68	8.46
Western Australia	9.03	9.01	11.11	10.72	11.37	9.44	9.28	7.73
Tasmania ... ..	8.83	9.51	10.30	8.96	10.10	8.67	7.88	7.54
Commonwealth ...	9.05	9.23	11.08	10.58	12.00	9.36	9.33	8.51
New Zealand ... ..	10.09	11.12	11.28	8.65	7.91	7.53	8.43	10.14

### *Conjugal Condition before Marriage.*

The males married during the year 1945 were 22,477 bachelors, 1,350 widowers, and 1,456 divorced men. Of the females 22,541 were spinsters, 1,243 were widows and 1,499 were divorced. The proportion of males re-married was 11.10 per cent. and of females 10.85 per cent.

The following table shows particulars relating to first marriages and re-marriages in quinquennial periods since 1891 and annually since 1938.

TABLE 30.—Conjugal Condition at Marriage, 1891 to 1945.

Period.	Males who were—			Females who were—			Rates per 10,000 Married.					
	Bachelors.	Widowers.	Divorced.	Spinsters.	Widows.	Divorced.	Bridegrooms.			Brides.		
							Bachelors.	Widowers.	Divorced.	Spinsters.	Widows.	Divorced.
1891-95	36,782	3,008	134	36,671	3,015	238	9,213	753	34	9,165	755	60
1896-00	41,808	3,379	280	41,998	3,043	426	9,115	743	62	9,257	669	94
1901-05	48,283	3,580	306	48,587	3,100	468	9,254	687	59	9,312	594	94
1906-10	59,499	3,807	418	59,894	3,249	581	9,237	697	66	9,399	510	91
1911-15	78,857	4,306	561	78,940	3,935	849	9,419	614	67	9,429	470	101
1916-20	73,145	4,762	874	73,089	4,605	1,027	9,285	604	111	9,278	592	130
1921-25	83,042	5,538	1,627	83,162	5,171	1,874	9,206	614	180	9,219	573	208
1926-30	88,786	6,423	2,156	89,688	4,164	2,413	9,223	603	214	9,317	432	251
1931-35	86,636	4,835	2,238	88,085	3,152	2,472	9,245	516	239	9,400	536	164
1936-40	116,630	5,986	3,869	118,205	4,149	4,061	9,222	473	305	9,351	328	321
1941-45	130,009	6,769	5,749	130,669	5,066	6,192	9,122	476	403	9,168	398	434
1938	22,588	1,198	793	22,962	784	833	9,190	457	323	9,342	319	339
1939	23,307	1,237	867	23,809	834	828	9,174	486	340	9,348	327	325
1940	28,208	1,281	875	28,418	946	1,000	9,290	422	238	9,359	312	329
1941	27,707	1,278	998	27,741	1,105	1,137	9,241	426	333	9,252	269	379
1942	31,918	1,506	1,109	32,075	1,204	1,254	9,247	436	321	9,288	349	363
1943	23,983	1,311	1,008	24,228	1,007	1,067	9,118	499	383	9,211	383	406
1944	23,924	1,324	1,178	24,084	1,107	1,235	9,053	501	446	9,114	419	467
1945	22,477	1,350	1,456	22,541	1,243	1,499	8,890	534	576	8,915	492	593

Re-marriage is greater among men than women. The proportion of widowers in the total marriages exceeded that of widows in each year after 1891 except the three years 1920 to 1922, when the variation was probably due to re-marriages of war widows. The excess of widowers over widows re-married increased after 1925, probably due, in part, to the introduction of widows' pensions in March, 1926.

In each year from 1893 to 1945 (except 1939) the proportion of re-marriages of divorced women exceeded that of divorced men. Re-marriages of divorcees have increased and in 1945 were numerically greater than those of widowers and widows. The number of divorced persons re-married in 1941-45 compared with those in 1931-35 increased as regards males by 157 per cent. and as regards females by 155 per cent.

The proportion of re-marriages reached its lowest point among both bridegrooms and brides in 1915, and the subsequent increase was due mainly to the re-marriage of divorced persons. The increase among brides was not as great as among bridegrooms, the increase in the divorced women among the former being offset by a decrease in the proportion of widows.

#### *Age at Marriage.*

The number of brides and bridegrooms in age groups in each of the last eight years is shown in the following table. The ages recorded are those stated at marriage by the contracting parties, without verification, as representing age last birthday.

TABLE 31.—Age at Marriage, 1938-1945.

Year.		Ages of Bridegrooms.				Ages of Brides.			
		Under 21 years.	21 to 29 years.	30 to 44 years.	45 and over.	Under 21 years.	21 to 29 years.	30 to 44 years.	45 and over.
1938.	...	1,263	15,707	6,095	1,514	5,380	15,112	3,284	803.
1939	...	1,300	16,418	6,177	1,576	5,439	15,827	3,382	823.
1940	...	1,591	20,002	7,166	1,605	7,001	18,332	4,176	855.
1941	...	1,784	19,473	6,961	1,765	7,314	17,461	4,217	991.
1942	...	2,214	22,525	7,715	2,079	8,758	19,936	4,698	1,141.
1943	...	1,907	16,753	5,829	1,813	7,289	14,368	3,644	1,001.
1944	...	1,986	16,966	5,710	1,764	7,479	14,252	3,696	999.
1945	{ B.	2,012	15,432	4,444	589	S. 6,973	12,714.	2,544	310.
	{ W.	...	70	374	906	W. 6	261	434	542.
	{ D.	...	231	860.	365	D. 10	487	814	188.

B, bachelors; S, spinsters; W, widowed; D, divorced.

Further details of the ages and conjugal condition of persons married each year are published in the Statistical Register of New South Wales.

In 1945 approximately 78 per cent. of first marriages among men and 87 per cent. among women were celebrated before attaining age 30, and the majority of marriages of persons over 45 years of age were re-marriages of one or both of the contracting parties, the proportion of such marriages being 68 per cent. among men and 70 per cent. among women.

The following statement shows the average age at marriage of bridegrooms and brides in various years since 1905. The difference between the ages at marriage of bachelors and spinsters is slightly less than 3 years, the males being the older. It has been reduced by almost half a year.

during the last 15 years. Men who re-marry are, on the average, between 5 and 6 years older than women who re-marry.

TABLE 32.—Average Age at Marriage, 1905 to 1945.

Year.	Average Age of—		Average Age of—		Year.	Average Age of—		Average Age of—	
	All Bride-grooms.	Bachelors.	All Brides.	Spinsters.		All Bride-grooms.	Bachelors.	All Brides.	Spinsters.
	years.	years.	years.	years.		years.	years.	years.	years.
1905	29.1	28.2	25.0	24.4	1939	29.2	27.7	25.6	24.7
1910	29.0	28.2	25.3	24.7	1940	28.8	27.5	25.5	24.6
1915	28.7	28.0	25.5	25.0	1941	28.8	27.4	25.6	24.4
1920	29.5	28.5	26.1	25.2	1942	28.7	27.2	25.5	24.3
1925	29.4	28.0	25.8	24.8	1943	28.9	27.2	25.5	24.2
1930	29.0	27.6	25.3	24.2	1944	28.7	26.9	25.4	24.1
1935	28.9	27.6	25.4	24.5	1945	29.0	27.0	25.7	24.2
1938	29.2	27.8	25.6	24.6					

The average age at marriage shows little variation from year to year though the average of both bachelors and spinsters fell by about 6 months between 1939 and 1945.

#### *Marriages of Minors.*

The number of minors married at each individual age is shown annually in the Statistical Register. The number of brides at each age under 21 in 1945, was 3 at 14, 48 at 15, 256 at 16, 689 at 17, 1,390 at 18, 2,092 at 19 and 2,511 at 20. The corresponding numbers of bridegrooms were 16 at 16, 78 at 17, 262 at 18, 629 at 19 and 1,027 at 20.

The following are the numbers and proportions of brides and bridegrooms married under the age of 21 years:—

TABLE 33.—Minors Married, 1876 to 1945.

Period.	Minors.		Proportion to Total Marriages.		Period.	Minors.		Proportion to Total Marriages.	
	Bride-grooms.	Brides.	Bride-grooms.	Brides.		Bride-grooms.	Brides.	Bride-grooms.	Brides.
			per cent.	per cent.				per cent.	per cent.
1876-80...	691	7,401	2.67	28.57	1931-35...	6,680	24,642	7.13	26.30
1881-85...	908	9,607	2.54	26.88	1936-40...	6,712	28,237	5.31	22.33
1886-90...	881	9,605	2.28	24.85	1941-45...	9,903	37,829	6.95	26.54
1891-95...	905	9,814	2.27	24.58	1938 ...	1,263	5,380	5.14	21.89
1896-00...	1,284	10,830	2.82	23.82	1939 ...	1,300	5,439	5.10	21.35
1901-05...	1,809	12,327	3.47	23.63	1940 ...	1,591	7,001	5.24	23.06
1906-10...	2,861	15,061	4.49	23.63	1941 ...	1,784	7,314	5.95	24.39
1911-15...	3,577	18,265	4.27	21.82	1942 ...	2,214	8,758	6.41	25.36
1916-20...	3,368	15,861	4.28	20.13	1943 ...	1,907	7,289	7.25	27.71
1921-25...	5,139	20,703	5.70	22.95	1944 ...	1,986	7,479	7.52	28.30
1926-30...	7,110	25,916	7.39	26.92	1945 ...	2,012	6,989	7.96	27.64

The proportion of minors among bridegrooms trended upwards, except in war years, until 1931, when the proportion was 9.12 per cent. There was a decline in each subsequent year to 5.10 per cent. in 1939, then an upward trend to 7.96 per cent. in 1945.

Among brides the proportion of minors has always been much larger than among bridegrooms, but it declined continuously for a long period until it fell below 20 per cent. in the post war years 1919 and 1920. Then the proportion increased rapidly to 30.55 per cent. in 1931, the highest level since 1875. It declined in each of the eight years 1932 to 1939, but rose during the war years to 28.30 per cent. in 1944 and remained relatively high in 1945.

#### *Mark Signatures in Marriage Registers.*

In 1860 the proportion of signatures made in the marriage register with marks was as high as 264.7 per 1,000 persons married, but it fell rapidly to 66.7 in 1880, to 14.5 in 1900, 2.0 in 1920, and in recent years it has been less than 1 per 1,000. The number of persons who signed in this way was only 17 in 1945, equal to 0.3 per 1,000 persons married in the year.

#### *Marriages according to Denomination.*

Of the marriages performed in New South Wales in 1945, 22,815, equivalent to 90.24 per cent. of the total, were celebrated by ministers of religion licensed under the authority of the Registrar-General. The number contracted before district registrars was 2,468, being 9.76 per cent. of the total.

The following table gives particulars of marriages according to denomination during the ten years, 1936 to 1945, and each of the last three years comparing the proportions in 1945 and the ten years 1936-1945:—

TABLE 34.—Denominational and Civil Marriages, 1936 to 1945.

Denomination.	1936-45.		1943.	1944.	1945.	
	Marriages.	Proportion.	Marriages.	Marriages.	Marriages.	Proportion.
		per cent.				per cent.
Church of England ... ..	109,777	40.81	10,804	11,229	10,467	41.40
Roman Catholic ... ..	55,748	20.72	5,577	5,349	5,035	19.92
Presbyterian ... ..	31,222	11.61	2,891	3,123	3,010	11.91
Methodist ... ..	30,090	11.19	3,014	2,890	2,827	11.18
Congregational ... ..	5,036	1.89	456	491	483	1.91
Baptist ... ..	4,654	1.73	406	425	435	1.72
Church of Christ ... ..	1,377	.51	165	100	122	.48
Salvation Army ... ..	1,135	.42	109	99	94	.37
Hebrew ... ..	904	.34	102	91	89	.35
All Other Sects ... ..	3,122	1.16	296	280	253	1.00
Total Denominational ... ..	243,115	90.38	23,820	24,082	22,815	90.24
Registrar's Offices ... ..	25,887	9.62	2,482	2,344	2,468	9.76
Total Marriages ... ..	269,002	100.00	26,302	26,426	25,283	100.00



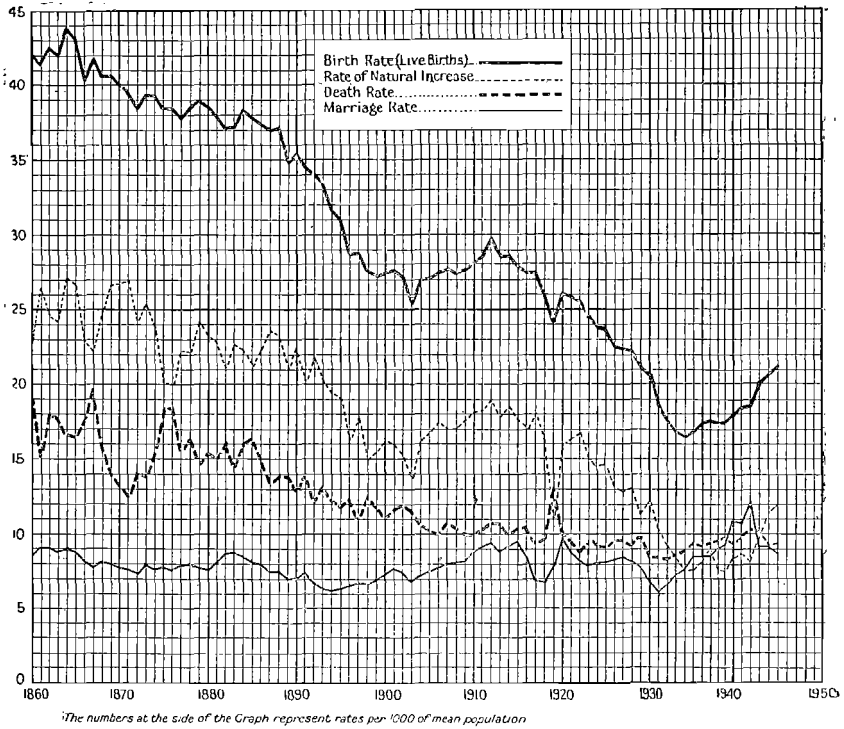
*Divorces.*

The number of marriages dissolved annually by divorce and decree for nullity is increasing rapidly and they represent a substantial ratio to the number of marriages celebrated.

The number dissolved by decrees for divorce and nullity of marriage made absolute in 1945 was 3,129, being in the proportion of 12.4 per cent. to the number of marriages celebrated during the year.

Particulars of the duration of marriages dissolved and number of issue are shown in the chapter, "Law Courts," of this Year Book.

**RATES OF BIRTHS, DEATHS, MARRIAGES,  
AND OF NATURAL INCREASE, 1860-1945.**

**LIVE BIRTHS.**

The crude birth rate showed a steady downward tendency from 1864 to 1888. It fell sharply from 1888 until 1903, then there was an improvement until 1912. During the war years (1914-1919) coincident with the decline in the marriage rate, there was a very rapid falling-off in the birth rate, with a recovery in 1920. After 1920, despite a temporary revival in the marriage rate until 1927, the birth rate declined in each year until 1934 when it was the lowest on record. Subsequently there was a slow increase in the birthrate as a consequence of a rapid increase in the marriage rate after 1931. The upward trend was accelerated in the last five years and the crude birth rate in 1945 was the highest since 1929.

The following table shows the average annual number of live births and the crude birth rate per 1,000 of the total population since 1881:—

TABLE 35.—Live Births, 1881 to 1945.

Period.	Average Annual Number of Live Births.	Birth-rate per 1,000 of Population.	Period.	Average Annual Number of Live Births.	Birth-rate per 1,000 of Population.
1881-85	31,793	37·74	1936-40	47,679	17·52
1886-90	37,660	36·36	1941-45	56,583	19·89
1891-95	39,513	32·93			
1896-00	36,716	27·98	1938	47,319	17·39
1901-05	37,969	26·94	1939	48,003	17·47
1906-10	42,994	27·77	1940	49,382	17·81
1911-15	51,661	28·73	1941	51,729	18·53
1916-20	51,540	26·27	1942	52,647	18·68
1921-25	54,449	24·74	1943	57,265	20·16
1926-30	53,318	21·77	1944	59,012	20·76
1931-35	44,907	17·29	1945	61,602	21·27

The rates shown above are calculated by the usual "crude" method of relating the births to the total population.

Rates calculated in the same way for the Commonwealth, each State and New Zealand, for certain recent years are shown in the following table. No allowance has been made for the differences in sex and age constitution of the respective populations.

TABLE 36.—Live Births, Comparative Rates, 1938 to 1945.

State or Country.	1938.	1939.	1942.	1943.	1944.	1945.
<i>New South Wales</i> ...	17·39	17·47	18·68	20·16	20·76	21·27
Victoria ...	16·25	16·20	18·28	19·75	19·70	20·46
Queensland ...	18·98	20·07	20·39	22·09	23·02	24·77
South Australia ...	15·88	16·13	18·46	21·36	21·40	22·31
Western Australia ...	19·87	19·41	20·68	21·85	22·39	21·77
Tasmania ...	20·82	21·02	22·04	23·10	21·19	23·32
Commonwealth ...	17·46	17·65	19·06	20·65	20·99	21·76
New Zealand ...	17·93	18·73	21·73	19·70	21·59	23·22

### *Relative Fertility.*

Crude birth rates may not be a true indicator of the trend in fertility over a period of time, and they are of limited use in comparisons with other States or countries. To obtain rates suitable for such purposes it is essential to eliminate the effects of changing age and sex constitution of the population and changes in the conjugal condition.

Fertility rates may be calculated by relating nuptial births to the number of married women; ex-nuptial births to single, widowed and divorced women; and total births to all women; or, for each of these groups, the specific fertility at each year of age or the general fertility for the whole of the reproductive ages combined (approximately 15 to 44 years), may be calculated. Data for precise calculations are available only in census years and years immediately preceding or succeeding a census.

In a long-term comparison to determine the trend in fertility, it is convenient to relate total births to the number of women (irrespective of conjugal condition) at each age and at the combined reproductive ages.

This has been done in the following table, which shows the fertility rate per 1,000 women in age groups from 15 to 44 years in each census year, 1891 to 1933 and in the years 1939 and 1943.

TABLE 37.—Births per 1,000 Women of Reproductive Age, 1891 to 1943.

Age Group. (Years.)	1891.	1901.	1911.	1921.	1933.	1939.	1943.
15-19	35.30	30.87	33.75	32.72	29.73	25.27	24.82
20-24	170.90	134.65	141.45	146.57	106.05	112.30	131.47
25-29	247.48	177.95	187.35	169.99	119.68	131.49	153.17
30-34	238.81	168.42	161.20	140.18	94.39	92.78	107.91
35-39	196.15	136.60	122.27	101.71	59.23	54.28	59.30
40-44	96.61	70.79	54.51	43.78	24.04	17.83	19.61
15-44	161.74	117.46	118.50	109.84	72.57	74.11	85.89

There has been a decline of 46.9 per cent. in the general fertility rate since 1891. The decline has been general in all age groups but it is more pronounced as the age advances. The contrast in experience in regard to the first and last quinquennia of the normal years of child-bearing is particularly striking. Whereas the birth rate for women at ages 40 to 44 years in 1891 was 174 per cent. greater than the rate for those aged 15 to 19 years, the corresponding proportion in 1921 was only 34 per cent. greater and in 1943 it was 21 per cent. lower. The fluctuations in the age groups 20-24 years and 25-29 years are probably the result of trends in the marriage rate. This is particularly noticeable in the year 1933 in a period of economic depression. The marriage rate in 1931 was the lowest ever recorded and the increase in marriages in subsequent years did not cause recovery in the birth rate until 1935. Because of this the 1933 figures were at an unusually low level. The higher rates in 1943 were associated with the war-time rise in the marriage rate.

An outstanding feature of the comparison is the rapidity with which the downward trend of the birth rate gathered momentum between 1921 and 1933. The relative decline during these twelve years was greater than the decline during the previous thirty years—1891 to 1921. It was most marked in the group 20 to 24 years, the fall being 27.6 per cent. between 1921 and 1933 as compared with 14.2 per cent. between 1891 and 1921. The rise in fertility rates shown for 1943 was due mainly (and perhaps wholly) to transient causes. The relative decline of births to women of reproductive age in each group is shown below:—

TABLE 38.—Decline in Birth Rates, 1891 to 1943.

Age Grp. (years.)	Proportionate Decrease in Birth Rates.				
	1891 to 1921. (30 years.)	1921 to 1933. (12 years.)	1933 to 1943. (10 years.)	1921 to 1943. (22 years.)	1891 to 1943. (52 years.)
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
15-19	7.3	9.9	16.5	24.1	29.7
20-24	14.2	27.6	+ 24.0	10.3	23.1
25-29	31.3	29.6	+ 28.0	9.9	38.1
30-34	41.3	32.7	+ 14.3	23.0	54.8
35-39	48.1	41.8	+ 0.2	41.7	69.8
40-44	54.7	45.1	18.4	55.2	79.7
15-44	32.1	33.9	+ 18.4	21.8	46.9

+ Denotes increase.

The crude birth rate for New South Wales was 25.0 per cent. lower in 1921 than in 1891, 34.5 per cent. lower in 1933 than in 1921 and 18.7 per cent. higher in 1943 than in 1933. The rate, calculated on the basis of the number of women of reproductive age, was lower by 32.1 per cent. and 33.9 per cent. in 1921 and 1933 respectively, but was 18.4 per cent. higher in 1943 than in 1933.

The particulars in Table 37 are not adequate to indicate differential fertility by age, for within age groups the rates change rapidly with each year of age. Table 39, which shows fertility measured by female births only, primarily for calculating gross reproduction rates, serves to illustrate differential fertility in single years of age. Fertility as measured by male births would be approximately equal to that shown because, over all ages combined, the average masculinity in each period was between 105 and 106 males per 100 females.

TABLE 39.—Female Births per 1,000 Women, 1910 to 1943.

(Average annual number of female children born per 1,000 women at each age.)

Age.	1910-12.	1920-22.	1932-34.	1941-43.	Age.	1910-12.	1920-22.	1932-34.	1941-43.
13	·07	·10	...	·04	30	85·64	74·82	50·60	57·00
14	·19	·32	·26	·12	31	76·25	72·15	52·00	50·80
					32	88·28	67·08	46·26	49·48
					33	79·35	65·92	39·07	46·59
15	1·36	·96	1·26	·77	34	72·08	62·93	41·47	40·85
16	4·91	3·95	4·10	3·02					
17	11·96	11·94	11·98	8·52	35	68·77	56·91	35·46	36·10
18	23·83	23·98	21·52	18·77	36	66·23	52·39	32·42	29·94
19	39·50	41·33	32·29	30·85	37	63·62	49·52	30·01	26·75
					38	53·91	45·78	26·03	24·57
					39	53·06	39·54	21·64	19·98
20	47·20	47·75	39·87	41·57					
21	65·41	62·27	48·08	53·91	40	40·67	30·59	17·55	15·32
22	69·46	74·46	54·83	66·65	41	30·72	22·92	15·75	11·90
23	82·24	82·70	56·74	73·14	42	28·95	21·92	11·99	9·88
24	88·75	84·10	59·68	71·52	43	21·60	16·27	8·48	5·93
					44	12·74	9·92	5·95	3·35
25	90·34	86·14	58·81	73·98	45	8·36	5·60	3·03	2·10
26	93·03	87·13	60·13	73·31	46	4·42	2·88	1·75	·89
27	93·59	82·22	59·11	71·81	47	2·10	1·25	·84	·28
28	93·58	80·51	55·36	69·34	48	·91	·57	·31	·17
29	89·93	81·06	55·91	62·95	49	·43	·43	·14	·06

Specific female fertility rates shown above form the basis of gross and net reproduction rates, which are used as a measure of the potential reproductive capacity of the female population based on the specific birth rates of any year.

The sum of each column of specific female birth rates may be taken as the number of female children born to 1,000 mothers who live right through the child-bearing period and at each year of age experience the fertility rates shown.

If these female children were to live through the child-bearing age and were to reproduce female children at the same rate as they themselves were produced, then, on the 1910-12 level, 1,753 female children would result from 1,000 mothers; on the 1920-22 level 1,550, on the 1932-34 level 1,061, and on the 1941-43 level 1,152. Reduced to unity these represent gross reproduction rates of 1.753, 1.550, 1.061 and 1.152 respectively.

From the life tables for New South Wales, however, it is possible to ascertain how many of these females would have survived to each year of the child-bearing age on the level of mortality prevailing in the periods specified. If the specific female birth rate at each age is applied only to the number, who, from 1,000 females born, would live throughout that year of age, the actual reproduction which would occur on the level of experience for each period can be measured. The summation of these results and reduction to unity in the manner described above gives the net reproduction rates. For New South Wales, in the periods shown, such rates were: 1910-12, 1.449; 1920-22, 1.349; 1932-34, .968; and 1941-43, 1.053. The figure for 1941-43 was calculated by using the 1932-34 life table.

It is emphasised that these rates are an index only and would not be actually experienced unless the age distribution of the population remained similar to that of the life table used, and the fertility rates remained at the same level as in the years specified. Nevertheless, the index is of value in illustrating the effect of a set of specific fertility rates on growth of population.

Both the gross and net reproduction rates for New South Wales shown above may be compared with those for the countries listed below, which have been calculated in the same manner. These figures are derived mainly from the Statistical Year Book of the League of Nations, 1942-1944.

TABLE 40.—Gross and Net Reproduction Rates.

Country.	Year.	Gross.	Net.	Country.	Year.	Gross.	Net.
Africa—				Europe—continued.			
Union of South Africa ... (white population)	1940	1.495	1.346*	Estonia ... ..	1938	.976	.790*
				Finland ... ..	1938	1.179	.960*
				France ... ..	1938	1.035	.910*
America—				Germany... ..	1936	1.063	.984
Canada ... ..	1940-42	1.416	1.274*	Hungary ... ..	1938	1.210	1.000*
United States (whites) ...	1942	1.270	1.189*	Italy ... ..	1935-37	1.425	1.131
Asia—				Netherlands ... ..	1942	1.305	1.196*
Japan ... ..	1937	2.145*	1.440*	Poland ... ..	1936	1.069	.914
Europe—				Scotland ... ..	1944	1.057	.895
Austria ... ..	1935	...	.64	Oceania—			
Belgium ... ..	1941	.804	.672*	Australia ... ..	1944	1.289	1.198*
Bulgaria ... ..	1933-36	1.073	1.192				
Czechoslovakia ... ..	1929-32	1.204	.939				
Denmark ... ..	1943	1.289	1.140				
England and Wales ...	1940	.850	.753*	New Zealand ... ..	1943	1.158	1.077*

\* Approximate data.

In considering reproduction rates for the years subsequent to 1939 regard should be paid to the incidence of war on the respective countries.

#### *Live Births to Mothers at Individual Ages.*

The number of live births to married and unmarried mothers in age-groups during 1944 and 1945 is shown in the following table. These figures should be distinguished from the number of confinements shown

in Table 53. The summary contained in Table 52 shows the relationship between the two sets of figures:—

TABLE 41.—Live Births, Age of Mother, 1944 and 1945.

Age Group (years).	Nuptial Live Births.			Ex-nuptial Live Births.			All Live Births.		
	Males.	Females.	Total.	M.	F.	Total.	Males.	Females.	Total.
1944.									
Under 15 ... ..	1	...	1	7	6	13	8	6	14
15-19 ... ..	1,181	1,084	2,265	313	305	618	1,494	1,389	2,883
20-24 ... ..	7,707	7,413	15,120	451	426	877	8,158	7,839	15,997
25-29 ... ..	9,128	8,908	18,036	232	241	473	9,360	9,149	18,509
30-34 ... ..	6,666	6,388	13,054	157	140	297	6,823	6,528	13,351
35-39 ... ..	3,392	3,245	6,637	95	110	205	3,487	3,355	6,842
40-44 ... ..	947	880	1,827	36	25	61	983	905	1,888
45-49 ... ..	42	75	117	3	5	8	45	80	125
50 and over ... ..	...	1	1	...	...	...	...	1	1
Not stated ... ..	...	...	...	2	...	2	2	...	2
Total ... ..	29,064	27,994	57,058	1,296	1,258	2,554	30,360	29,252	59,612
1945.									
Under 15 ... ..	...	1	1	3	3	6	3	4	7
15-19 ... ..	1,310	1,109	2,419	323	279	602	1,633	1,388	3,021
20-24 ... ..	8,102	7,509	15,611	514	491	1,005	8,616	8,000	16,616
25-29 ... ..	9,217	8,878	18,095	253	256	509	9,470	9,134	18,604
30-34 ... ..	7,123	6,664	13,787	190	161	351	7,313	6,825	14,138
35-39 ... ..	3,590	3,371	6,961	97	80	186	3,687	3,460	7,147
40-44 ... ..	985	939	1,924	34	21	55	1,019	960	1,979
45-49 ... ..	63	75	138	7	3	10	70	78	148
50 and over ... ..	...	...	...	1	...	...	...	...	...
Not stated ... ..	...	...	...	...	1	2	1	1	2
Total ... ..	30,390	28,546	58,936	1,422	1,304	2,726	31,812	29,850	61,662

Similar information for single years of age is published in the Statistical Register of New South Wales.

#### *Birth Rates—Metropolis and Remainder of the State.*

Data for distinguishing the births in the metropolis from those in other districts are not available on a comparable basis prior to 1st January, 1927, because only since that date have births been allocated according to the usual address of the mother and not as formerly according to the district in which the birth occurred. Within the period covered by the following table the metropolitan boundary was extended (in 1933) and for the purpose of comparison the figures for the metropolis and the remainder of the State for years prior to 1933 have been adjusted to the present boundaries.

TABLE 42.—Live Births, Metropolis and Country, 1927 to 1945.

Year.	Average Annual Number of Live Births.			Live Births per 1,000 of Population.		
	Metropolis.	Remainder of State.	New South Wales.	Metropolis.	Remainder of State.	New South Wales.
1927-30	22,812 *	30,554 *	53,366	19.53*	23.38 *	21.56
1931-35	17,519 *	27,448 *	44,967	14.21*	20.06 *	17.63
1936-40	18,748	28,931	47,679	14.62	20.11	17.52
1941-45	26,079	30,504	56,583	†	†	19.89
1938	18,559	28,760	47,319	14.48	19.98	17.39
1939	19,323	28,680	48,003	14.93	19.72	17.47
1940	19,042	20,440	40,382	15.29	20.06	17.81
1941	22,366	29,363	51,729	16.94	19.99	18.53
1942	26,220	29,427	52,647	17.13	20.18	18.68
1943	26,989	30,276	57,265	19.41	20.87	20.16
1944	28,318	31,294	59,612	†	†	20.76
1945	29,501	32,161	61,662	†	†	21.27

\* On the basis of boundaries as existing from 1933.

† Not available.

The age and sex constitution of the metropolitan population differs considerably from that of the remainder of the State, therefore, comparisons of crude birth rates are to be taken with reserve. The birth rate per 1,000 women aged 15 to 44 years in 1933 was 54.66 in the metropolis and 92.19 in the remainder of the State. The proportion of married women amongst those of child bearing age was 51 per cent. in the metropolis and 57 per cent. in the remainder of the State in 1921—the latest date for which the information is available.

*The Sexes of Children.*

Of the 61,662 children born during 1945 (exclusive of those still-born), 31,812 were males and 29,850 were females, the proportion being 106.6 males to 100 females. As far as observation extends, the number of female births has not exceeded that of males in any year, although the difference has sometimes been very small.

The table below shows the number of males born alive to every 100 females born alive, both in nuptial and ex-nuptial births, since 1881:—

TABLE 43.—Live Births, Masculinity, 1881 to 1945.

Period.	Nuptial Live Births.	Ex-Nuptial Live Births.	All Live Births.	Periods.	Nuptial Live Births.	Ex-Nuptial Live Births.	All Live Births.
1881-85	104.9	103.8	104.8	1931-35	105.5	102.8	105.4
1886-90	105.3	99.2	105.0	1936-40	104.4	106.1	104.5
1891-95	105.8	107.4	105.9	1941-45	105.1	105.2	105.1
1896-00	105.0	103.2	104.9				
1901-05	104.4	102.7	104.3	1941	104.2	103.5	104.2
1906-10	105.3	105.1	105.3	1942	106.7	103.5	106.6
1911-15	105.0	104.3	105.0	1943	104.4	106.0	104.5
1916-20	105.3	106.3	105.3	1944	103.8	103.0	103.8
1921-25	104.4	107.1	104.5	1945	106.5	109.0	106.6
1926-30	105.7	106.5	105.7				

*Ex-nuptial Live Births.*

The number of ex-nuptial live births in 1945 was 2,726, equal to 4.42 per cent. of the total live births and 0.94 per 1,000 of population. A statement of the ex-nuptial live births in New South Wales since 1901 is given below:—

TABLE 44.—Ex-nuptial Live Births, 1901 to 1945.

Period.	Average Annual Number of Ex-nuptial Live Births.	Ratio per cent. to Total Live Births.	Crude Rate per 1,000 of Population.	Year.	Number of Ex-nuptial Live Births.	Ratio per cent. to Total Live Births.	Crude Rate per 1,000 of Population.
1901-05 ...	2,658	7.00	1.89	1938 ...	1,983	4.19	.73
1906-10 ...	2,912	6.77	1.88	1939 ...	1,989	4.14	.73
1911-15 ...	2,829	5.48	1.57	1940 ...	1,877	3.80	.68
1916-20 ...	2,571	4.99	1.31	1941 ...	2,035	3.93	.73
1921-25 ...	2,681	4.92	1.22	1942 ...	2,045	3.88	.73
1926-30 ...	2,682	5.03	1.09	1943 ...	2,260	3.95	.80
1931-35 ...	2,244	4.99	.86	1944 ...	2,554	4.28	.89
1936-40 ...	2,010	4.22	.74	1945 ...	2,726	4.42	.94
1941-45 ...	2,324	4.11	.82				

The proportion of ex-nuptial to total live births declined in each quinquennial period from 1905 to 1920, the proportion was fairly constant in succeeding periods but there was further decline between 1936 and 1940, followed by an appreciable increase between 1940 and 1945.

A more precise measure of the rate of ex-nuptial births is obtained by relating the total number of such births recorded to the number of unmarried women of child-bearing age. This can only be done satisfactorily at census periods, and it indicates that the proportion of ex-nuptial children born, per 1,000 unmarried women aged 15 to 44, was 18.41 in 1891, 14.18 in 1911, and 8.20 in 1933, a decrease of 55 per cent. since 1891.

*Previous Issue.*

Details of the previous issue of women who gave birth to children were recorded for the years 1894 to 1907, the record was then discontinued until 1938. Summarised figures for 1944 and 1945 are as follow:—

TABLE 45.—Previous Issue and Age of Mother, 1944 and 1945.

Age of Mother (years).	Previous Issue.											Total Mothers	Average Number of Children. *
	0	1	2	3	4	5	6	7	8	9	10 & over.		
1944.													
Under 15 ...	1	...	...	...	...	...	...	...	...	...	...	1	1'00
15-19 ...	1,882	339	29	1	...	...	...	...	...	...	...	2,251	1'18
20-24 ...	9,032	4,139	1,305	393	99	23	3	...	...	...	...	14,994	1'57
25-29 ...	6,271	6,260	3,024	1,323	580	235	113	31	7	1	...	17,850	2'17
30-34 ...	2,678	3,967	2,764	1,488	864	512	303	149	79	43	28	12,875	2'89
35-39 ...	876	1,417	1,355	951	636	447	312	233	139	87	88	6,541	3'78
40-44 ...	181	220	248	247	219	160	126	115	83	67	136	1,802	5'17
45-49 ...	16	4	11	7	12	13	13	11	7	6	16	116	6'34
50 and over	...	...	...	...	...	...	...	...	...	...	1	1	13'00
Not stated	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	20,937	16,346	8,736	4,415	2,410	1,390	870	539	315	204	269	56,431	2'43
Proportion per cent of Total Mothers.	37'10	28'97	15'48	7'82	4'27	2'46	1'54	'96	'56	'36	'48	100'00	...
1945.													
Under 15 ...	1	...	...	...	...	...	...	...	...	...	...	1	1'00
15-19 ...	2,058	322	24	1	...	...	...	...	...	...	...	2,406	1'16
20-24 ...	9,383	4,283	1,318	381	92	17	2	...	...	...	...	15,475	1'56
25-29 ...	6,236	6,183	3,136	1,363	603	251	78	36	7	1	...	17,898	2'19
30-34 ...	2,779	4,080	3,184	1,584	852	507	304	180	74	34	10	13,597	2'88
35-39 ...	992	1,563	1,362	1,013	644	449	308	211	153	83	98	6,876	3'70
40-44 ...	186	258	289	267	206	158	138	98	85	87	122	1,894	5'04
45-49 ...	8	9	10	22	17	23	9	7	11	5	15	136	6'07
50 and over	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	21,643	16,098	9,323	4,633	2,415	1,405	837	534	330	210	255	58,283	2'42
Proportion per cent. of Total Mothers.	37'13	28'65	16'00	7'95	4'14	2'41	1'43	'92	'57	'36	'44	100'00	...

\* Including children born at present confinement.

Details for each age are published annually in the Statistical Register.

In 1894, 51 per cent. of the children born represented the fourth or later child. In 1941 such proportion was only 19.15 per cent., and in 1945 only 18.22 per cent. Comparison indicates that since 1894 there has been



an increase in the proportion of first and second children, the proportion of third children has remained almost constant, but a decrease is apparent for the fourth child and this becomes greater as the number of previous issue increases.

*First Live Births.*

A record has been kept of the number of first live births in each year since 1893. By first live birth is meant the first child born alive to a mother since marriage and includes only the first born alive of twins and triplets. The figures are restricted to births to married mothers as details as to other issue of the mother are not recorded in registrations of ex-nuptial births.

In the following table are shown details of married mothers confined for their first live birth, related to total confinements at which a child was born living. This basis of compilation differs from that previously shown in this chapter.

TABLE 46.—First Live Births, 1896 to 1945.

Period.	Confinements of Married Mothers.			Proportion of First Confinements to Total.
	For First Live Birth.	For other Live Birth.	Total.	
				per cent.
1896-00 ...	35,603	133,546	169,149	21·0
1901-05 ...	42,284	132,383	174,667	24·2
1906-10 ...	51,000	147,195	198,195	25·7
1911-15 ...	68,205	173,161	241,366	28·3
1916-20 ...	64,225	177,847	242,072	26·5
1921-25 ...	72,949	183,237	256,186	28·5
1926-30 ...	76,602	173,888	250,490	30·6
1931-35 ...	67,289	144,171	211,460	31·8
1936-40 ...	85,023	140,981	226,004	37·6
1941-45 ...	105,659	162,702	268,361	39·4
1938 ...	16,699	28,189	44,888	37·2
1939 ...	17,585	27,946	45,531	38·6
1940 ...	18,261	28,754	47,015	38·8
1941 ...	19,981	29,174	49,155	40·6
1942 ...	20,452	29,612	50,064	40·9
1943 ...	22,646	31,782	54,428	41·6
1944 ...	20,937	35,494	56,431	37·1
1945 ...	21,643	36,640	58,283	37·1

The number of first births moves in direct ratio to the marriages contracted in immediately preceding years, but the persistent rise in the proportion of first births is not due to an increased marriage rate so much as to a declining proportion of children after the first, a result of family limitation. Indications are that the proportion of first births to relevant marriages declined over the past twelve years so that there was greater decline in births after the first than in first births.

Further evidence of this trend is seen in the birth rates in age groups, as shown in Table 37, which indicate that between 1891 and 1943, the decrease in birth rates in quinquennial age groups became progressively greater as age advanced, and was smaller at lower ages when first births are most frequent.

Particulars in the following table show that the proportion of first births to total births is much higher in the metropolis than in the remainder of the State; the information is available from 1936 only. The proportions shown for the State as a whole differ slightly from those in Table 46 which were calculated on the basis of confinements instead of total births in order to give greater precision.

TABLE 47.—First Live Births—Metropolis and Country, 1938 to 1945.

Division.	Proportion per cent. of First Births to Total Births.					
	1938.	1939.	1942.	1943.	1944.	1945.
Metropolis ... ..	44·4	45·4	49·3	49·4	43·9	43·5
Remainder of State ...	31·9	33·4	33·4	33·8	30·2	30·6
State ... ..	36·8	38·2	40·4	41·2	36·7	36·7

In comparisons of fertility in the metropolis and country allowance should be made for a varying incidence of marriage and different proportions of newly-married couples in the respective areas.

Details of the interval between marriage and first live birth in relation to the age of the mother are published in the "Statistical Register."

Summaries for 1944 and 1945 are as follow:—

TABLE 48.—First Live Births, Age of Mother and Interval Since Marriage, 1944 and 1945.

Age of Mother. (years.)	Interval.																				Total.
	Months.										Years.										
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	1-2	2-3	3-4	4-5	5 and over.				
1944.																					
Under 15	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
15-19	...	24	27	48	78	117	176	244	191	117	177	122	85	424	46	...	5	1	...	1,882	
20-24	...	24	50	42	76	126	209	310	312	392	769	572	506	3,510	1,518	438	137	41	...	9,032	
25-29	...	13	16	20	15	26	39	65	75	138	306	220	215	1,760	1,432	879	506	536	...	6,261	
30-34	...	7	3	9	10	14	26	19	30	38	96	68	78	590	429	350	275	646	...	2,688	
35-39	...	3	...	3	5	10	8	8	11	10	43	21	17	179	105	104	57	292	876	...	
40-44	...	3	1	1	...	2	2	3	1	2	2	1	5	36	28	18	16	60	181	...	
45 and over	...	...	...	...	...	2	...	...	1	...	...	...	...	4	1	2	2	4	16	...	
Total ...	...	74	97	123	184	296	462	649	621	697	1,393	1,004	906	6,503	3,559	1,796	994	1,579	20,937	...	
1945.																					
Under 15	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	
15-19	...	22	25	50	76	137	186	283	255	123	216	122	90	397	68	...	7	...	...	2,058	
20-24	...	21	36	53	79	121	183	341	370	445	930	563	402	3,233	1,614	668	184	50	...	9,383	
25-29	...	15	5	14	21	20	37	60	81	162	350	248	185	1,512	1,284	1,036	614	592	...	6,236	
30-34	...	8	8	8	7	9	21	32	42	41	126	100	68	522	399	333	284	771	...	2,779	
35-39	...	4	3	4	3	10	6	12	10	22	29	22	21	176	146	92	81	351	992	...	
40-44	...	2	2	1	1	3	1	3	2	2	4	8	6	34	24	9	12	72	186	...	
45 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	4	8	...	
Total ...	...	72	80	130	187	300	434	731	760	795	1,655	1,063	862	5,875	3,536	2,146	1,177	1,840	21,643	...	

## STILLBIRTHS.

The number of stillbirths registered in New South Wales in 1945 was 1,540. Of these 856 were males and 684 females, the masculinity (125 males to 100 females) being considerably higher than amongst the live births (107 males to 100 females).

Amongst ex-nuptial births the frequency of stillbirth is usually higher than amongst the nuptial births. In 1945 the respective proportions were 26.08 ex-nuptial and 24.29 nuptial stillbirths to 1,000 of all births (live and still).

Of the total stillbirths 729 were in the metropolis and 811 in the remainder of the State, the proportion per 1,000 of all births (live and still) being 24.12 in the former and 24.60 in the latter.

Compulsory registration of stillbirths became effective on 1st April, 1935. Details for each year from 1938 to 1945 and in quinquennial periods since 1936 are as follows:—

TABLE 49.—Stillbirths (N.S.W.) 1936 to 1945.

Year.	Number of Stillbirths.					Rate per 1,000 of All Births (Live and Still).			Proportion of Ex-nuptial to Total Stillbirths.	Male Stillbirths per 1,000 Female Stillbirths.	
	Nuptial.		Ex-nuptial.		Total.	Nuptial	Ex-nuptial.	Total.			
	Males.	Females	Males.	Females							
1936-40	...	3,827	2,860	191	168	7,046	28.45	34.49	28.71	Percent.	1,327
1941-45	...	3,909	3,092	215	175	7,391	25.16	32.47	25.46	5.23	1,262
1938 ...	...	765	633	38	37	1,473	29.91	36.44	30.19	5.09	1,199
1939 ...	...	741	542	48	29	1,360	27.13	37.27	27.55	5.66	1,382
1940 ...	...	727	554	33	28	1,342	26.26	31.48	26.46	4.55	1,306
1941 ...	...	770	629	32	33	1,464	27.38	30.95	27.52	4.44	1,211
1942 ...	...	750	581	41	39	1,411	25.63	37.65	26.10	5.67	1,276
1943 ...	...	752	631	48	34	1,465	24.53	35.01	24.94	5.60	1,203
1944 ...	...	824	597	51	39	1,511	24.30	34.04	24.72	5.96	1,376
1945 ...	...	813	654	43	30	1,540	24.29	26.08	24.37	4.74	1,251

A comparison of the experience of New South Wales with that of other Australian States where stillbirths are registered and New Zealand is shown below. Victorian figures represent notifications only, but the number not notified is considered to be very small.

TABLE 50.—Stillbirths, States, 1942 to 1945.

State or Country.	Number.				Per 1,000 of all Births (Live and Still).			
	1942.	1943.	1944.	1945.	1942.	1943.	1944.	1945.
New South Wales ...	1,411	1,465	1,511	1,540	26.10	24.94	24.72	24.37
Victoria ...	950	1,026	924	981	25.76	25.56	22.94	23.26
South Australia ...	291	311	336	338	25.15	23.11	24.62	23.52
Western Australia ...	208	278	274	224	20.58	24.94	24.59	20.56
New Zealand (excludes Maoris) ...	891	817	799	865	25.85	26.25	23.23	22.84

## PLURAL BIRTHS.

Prior to 1935 cases of plural births with only one child born alive were often recorded as single births. Since the introduction of compulsory registration of stillbirths (from 1st April, 1935), all cases of plural births are recorded.

During the year 1945 there were 734 cases of plural births. They consisted of 722 cases of twins and 12 cases of triplets. The live children born as twins numbered 1,375 (704 males and 671 females), and 64 were stillborn; the live children born as triplets numbered 32 (9 males and 23 females), and four were stillborn. Of the plural births, 25 cases of twins were ex-nuptial, with no cases in which both were stillborn.

The following table shows the number of cases of twins and triplets born in New South Wales during the years 1943 to 1945 distinguishing nuptial and ex-nuptial; there was one case of ex-nuptial births of triplets in 1945:—

TABLE 51.—Plural Births, 1943, 1944 and 1945.

Particulars.	1943.			1944.			1945.		
	Nup-tial.	Ex-Nup-tial.	Total.	Nup-tial.	Ex-Nup-tial.	Total.	Nup-tial.	Ex-Nup-tial.	Total.
Cases of Twins—									
Both living ... ..	572	22	594	616	24	640	634	24	658
One stillborn ... ..	46	2	48	50	2	52	58	1	59
Both stillborn ... ..	11	...	11	13	1	14	5	...	5
Total Cases of Twins	629	24	653	679	27	706	697	25	722
Cases of Triplets—									
All living ... ..	2	...	2	5	...	5	8	...	8
One stillborn ... ..	1	...	1	1	...	1	3	1	4
All stillborn ... ..	2	...	2	...	...	...	...	...	...
Total Cases of Triplets	5	...	5	6	...	6	11	1	12
Total Cases of Plural Births ... ..	634	24	658	685	27	712	708	26	734

The number of cases of plural births recorded in 1945 represented 11.75 cases per 1,000 confinements, while the number of children born at plural births was 2.36 per cent. of all births (both live and still).

There were 3,294 cases of twins, and 35 cases of triplets in the five years 1941-1945. In this period the number of confinements was 286,937 and the rates per 100,000 confinements were 1,148 cases of twins and 12 cases of triplets. Otherwise stated, there were 12 cases of plural births in every 1,000 confinements.

Seven cases of quadruplets have been recorded, the last in 1930.

## SUMMARY OF LIVE BIRTHS AND STILLBIRTHS.

The following table shows the number of confinements, live births, stillbirths and plural births in the year 1945:—

TABLE 52.—Confinements and Children Born, 1945.

Class of Birth.	Confinements.		Children.						
	Married Mothers.	Un-married Mothers.	Born Living.		Stillborn.		All Births.		
			Nuptial.	Ex-nuptial.	Nuptial.	Ex-nuptial.	Nuptial.	Ex-nuptial.	Total.
Single Births ...	58,966	2,746	57,580	2,675	1,386	71	58,966	2,746	61,712
Twins—									
Both Living ...	634	24	1,268	48	...	...	1,268	48	1,316
One living, one stillborn ...	58	1	58	1	58	1	116	2	118
Both stillborn...	10	...	...	...	20	...	20	...	20
			1,326	49	78	1	1,404	50	1,454
Triplets—									
All living ...	8	...	24	...	...	...	24	...	24
One stillborn ...	3	1	6	2	3	1	9	3	12
All stillborn ...	...	...	...	...	...	...	...	...	...
			30	2	3	1	33	3	36
Total	59,679	2,772	58,936	2,726	1,467	73	60,403	2,799	...
	62,451		61,662		1,540		....		63,202

The number of confinements to married and unmarried mothers in age groups in 1944 and 1945 is shown below. Details for single years of age are shown in the Statistical Register:—

TABLE 53.—Confinements, Ages of Mothers, 1944 and 1945.

Age Group (years).	1944.			1945.		
	Number of Confinements.			Number of Confinements.		
	Married Mothers.	Unmarried Mothers.	Total.	Married Mothers.	Unmarried Mothers.	Total.
Under 15 ...	1	14	15	1	6	7
15-19... ..	2,298	638	2,936	2,454	613	3,067
20-24... ..	15,229	894	16,123	15,759	1,020	16,779
25-29... ..	18,231	481	18,712	18,257	514	18,771
30-34... ..	13,244	302	13,546	13,956	356	14,312
35-39... ..	6,761	211	6,972	7,111	192	7,303
40-44... ..	1,890	67	1,957	1,998	56	2,054
45-49... ..	133	8	141	143	12	155
50 and over ...	1	...	1	...	...	...
Not stated ...	...	2	2	...	3	3
Total ...	57,788	2,617	60,405	59,679	2,772	62,451

## THE LEGITIMATION ACT, 1902.

In 1902 an Act was passed to legitimise children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Act, any child who comes within the scope of its purpose born before or after the passing thereof, is deemed to be legitimised from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. The total number of registrations under the Act up to the end of the year 1945 was 16,780. The number in each of the last ten years is shown in the following table:—

TABLE 54.—Legitimations, 1902 to 1945.

Year.	Registrations.	Year.	Registrations.
1902-1935	12,864	1941	475
1936	395	1942	371
1937	463	1943	345
1938	371	1944	294
1939	385	1945	269
1940	548	1902-1945	16,780

## NATURAL INCREASE.

Statistics of natural increase as shown below indicate the extent to which the population of New South Wales has increased by the excess of births over deaths. The annual rates are based on total population and allowance has not been made for the effect of the changing age distribution of the people on the number of births and deaths. Therefore the rates do not provide a satisfactory indication of the normal trend in natural increase.

Particulars regarding net reproduction rates are shown on pages 62 and 63.

The following table shows the natural increase of population since 1881. Figures for 1939 and subsequent years are shown on a dual basis, viz., excess of births over civilian deaths and over all deaths (including those of defence personnel overseas). For the war years 1914-18 deaths of defence forces overseas were not included in the calculation of natural increase.

TABLE 55.—Natural Increase, 1881 to 1945.

Period.	Natural Increase—Whole State. (Excess of Births over Deaths.)			Annual Rates per 1,000 of Population.		
	Males.	Females.	Total.	Births.	Deaths.	Natural Increase.
1881-85 ...	42,658	50,204	92,862	37·74	15·69	22·05
1886-90 ...	54,753	62,090	116,843	36·36	13·80	22·56
1891-95 ...	56,834	63,930	120,764	32·93	12·80	20·13
1896-00 ...	48,692	67,107	115,799	27·98	11·85	16·13
1901-05 ...	51,179	59,163	110,342	26·94	11·28	15·66
1906-10 ...	64,249	71,215	135,464	27·77	10·27	17·50
1911-15 ...	77,202	86,918	164,120	28·73	10·48	18·25
1916-20 ...	71,947	81,788	153,735	26·27	10·60	15·67
1921-25 ...	80,815	89,523	170,338	24·74	9·26	15·48
1926-30 ...	72,380	80,693	153,073	21·77	9·27	12·50
1931-35 ...	51,557	60,294	111,851	17·29	8·69	8·60
1936-40 ...	49,092	60,628	109,720	17·52	9·46	8·06
1941-45 ...	68,071	75,809	143,880	19·89	9·78	10·11

TABLE 55.—Natural Increase, 1881 to 1945—*continued*.

Period.	Natural Increase—Whole State. (Excess of Births over Deaths.)			Annual Rates per 1,000 of Population.		
	Males.	Females.	Total.	Births.	Deaths.	Natural Increase.
Excess of Births over Civilian Deaths.						
1939 ... ..	9,441	11,747	21,188	17.47	9.76	7.71
1940 ... ..	10,289	12,950	23,239	17.81	9.43	8.38
1941 ... ..	11,187	13,242	24,429	18.53	9.78	8.75
1942 ... ..	10,698	12,730	23,428	18.68	10.37	8.31
1943 ... ..	13,316	15,079	28,395	20.16	10.16	10.00
1944 ... ..	15,866	17,094	32,960	20.76	9.28	11.48
1945 ... ..	17,004	17,664	34,668	21.27	9.31	11.96
Excess of Births over All Deaths.						
1940 ... ..	10,153	12,949	23,102	17.81	9.48	8.33
1941 ... ..	9,808	13,241	23,049	18.53	10.28	8.25
1942 ... ..	6,704	12,727	19,431	18.68	11.79	6.89
1943 ... ..	10,220	15,072	25,292	20.16	11.25	8.91
1944 ... ..	13,783	17,082	30,865	20.76	10.01	10.75
1945 ... ..	14,487	17,659	32,146	21.27	10.18	11.09

The general decline in the rate of natural increase since 1890 has been due to a greater decline in the birth rate than in the death rate. An improvement in both birth and death rates during the decennium 1906 to 1915 is reflected in the rate of natural increase. In 1919 deaths were increased by the influenza epidemic, and the birth rate was low. After 1921 the birth rate declined rapidly until 1935 and despite lower death rates the rate of natural increase fell to a very low level. A rise in birth rate since 1939 has more than offset the loss of life among members of the forces.

Although there are more males born than females, the increase of population from the excess of births over deaths is greatly in favour of the latter, since the death rate is higher among males. During the ten years ended 1945 the number of females added to the population by excess of births over civilian deaths was 19,274 or 16 per cent., more than the corresponding number of males.

The increases in population from natural and migratory causes are shown in Chapter "Population" of this Year Book.

The table below shows the rates of natural increase per 1,000 of population in the Australian States and New Zealand. Figures for war years represent excess of births over civilian deaths.

TABLE 56.—Natural Increase, States, 1938 to 1945.

State or Country.	1938.	1939.	1942.	1943.	1944.	1945.
<i>New South Wales</i> ...	7.80	7.71	8.31	10.00	11.48	11.96
<i>Victoria</i> ... ..	6.10	5.48	7.10	8.98	9.44	10.28
<i>Queensland</i> ... ..	9.79	10.67	11.12	12.03	14.21	16.00
<i>South Australia</i> ...	6.53	6.51	7.47	10.83	11.78	12.69
<i>Western Australia</i>	10.67	10.10	10.08	12.29	13.16	12.16
<i>Tasmania</i> ... ..	11.11	10.83	11.95	12.67	11.03	13.59
<i>Commonwealth</i> ...	7.82	7.72	8.57	10.35	11.46	12.24
<i>New Zealand</i> ... ..	8.22	9.53	11.13	9.66	11.72	13.15

## DEATHS.

Although for purposes of record stillbirths are registered as deaths as well as births, they are excluded from the deaths shown in the Year Book and in the Statistical Register of New South Wales.

In 1940 and 1941 the recorded deaths include Australian defence personnel who died in New South Wales but not those who died elsewhere. The deaths in 1942 to 1945, inclusive, relate to civilians only.

Known deaths of Australian defence personnel enlisted in New South Wales recorded to the end of 1945 numbered 13,242. This figure is exclusive of deaths of those who remained posted as "missing" or "prisoner of war" and is subject to revision as additional information becomes available.

Civilian deaths (excluding stillbirths) during 1945 numbered 26,994 equal to a rate of 9.31 per 1,000 of the mean population. Of the total, 14,808 were males and 12,186 females, the rate for the former being 10.22 and for the latter 8.41 per 1,000 living. The average annual number of deaths since 1881, with the rate per 1,000 of population, in quinquennial periods, was as follows:—

TABLE 57.—Deaths, 1881 to 1945.

Period.	Average Annual Number of Deaths. (excluding Stillbirths.)			Death rate per 1,000 of Population.			Proportion per cent. of Male to Female Rate
	Males.	Females.	Total.	Males.	Females.	Total.	
1881-85	7,738	5,483	13,221	16.72	14.45	15.69	116
1886-90	8,337	5,954	14,291	14.73	12.68	13.80	116
1891-95	8,955	6,405	15,360	13.88	11.54	12.80	120
1896-00	9,058	6,499	15,557	13.01	10.55	11.85	123
1901-05	9,146	6,754	15,900	12.43	10.03	11.28	124
1906-10	9,203	6,698	15,901	11.44	9.00	10.27	127
1911-15	11,020	7,817	18,837	11.69	9.13	10.48	128
1916-20	12,052	8,750	20,802	12.14	9.02	10.60	135
1921-25	11,660	8,721	20,381	10.39	8.08	9.26	129
1926-30	12,925	9,779	22,704	10.25	8.14	9.27	127
1931-35	12,760	9,837	22,597	9.67	7.67	8.69	126
1936-40	14,542	11,193	25,735	10.60	8.30	9.46	128
1941-45	15,383	12,424	27,807	10.79	8.75	9.78	123
1939	15,116	11,699	26,815	10.92	8.58	9.76	127
1940	14,881	11,262	26,143	10.67	8.17	9.43	131
1941	15,209	12,091	27,300	10.85	8.70	9.78	125
1942	16,461	12,758	29,219	11.64	9.08	10.37	128
1943	15,944	12,926	28,870	11.20	9.12	10.16	123
1944	14,494	12,158	26,652	10.08	8.48	9.28	119
1945	14,808	12,186	26,994	10.22	8.41	9.31	122

The death rate declined continuously for both sexes up to 1932, when it was lowest at 8.28 per 1,000. The decline was faster for females than for males and the rates have risen slightly, for males from 9.16 in 1931, and for females from 8.28 per 1,000 in 1932 to 10.22 and 8.41 per 1,000 respectively in 1945, reflecting the increasing age constitution of the population. However, as shown above, the rate for both sexes combined during the five years 1881-85 was 60 per cent. higher than in the five years 1941-45. Many causes are responsible for this improvement, such as the enforcement of Health Acts, the advance of science, and the better education of the people. The effect of these factors on the death rates of the population in the early years of life is discussed later in connection with deaths of children under 1 year and under 5 years of age.



A table of the death rates per 1,000 of mean population in each of the Australian States and New Zealand from 1938 to 1945 is shown below:—

TABLE 58.—Death Rates, States, 1938 to 1945.

State or Country.	1938.	1939.	1942.	1943.	1944.	1945.
<i>New South Wales...</i>	9.59	9.76	10.37	10.16	9.28	9.31
Victoria ...	10.15	10.72	11.18	10.77	10.26	10.18
Queensland ...	9.19	9.40	9.27	10.06	8.81	8.77
South Australia ...	9.35	9.62	10.99	10.53	9.62	9.62
Western Australia	9.20	9.31	10.60	9.56	9.23	9.61
Tasmania ...	9.71	10.19	10.09	10.43	10.16	9.73
Commonwealth ...	9.64	9.93	10.49	10.30	9.53	9.52
New Zealand ...	9.71	9.20	10.60	10.04	9.87	10.07

This comparison is based on crude death rates, and differences in the age and sex constitution of the individual populations have not been taken into account, therefore the rates are not strictly comparable with each other as showing the true incidence of mortality in the various States.

Such a comparison can be made by applying the rates of mortality in age and sex groups to a standard population embodying a fixed distribution according to age and sex. The resultant rates constitute an index of mortality or weighted average death rate which, in effect, shows what would have been the death rate if the age and sex distribution of the population concerned had been in accordance with the standard adopted. The standard used is identical with that provided by the International Statistical Institute in Part II, p. viii of the *Annuaire International de Statistique*, 1917.

The following table shows, for the last two census years, the comparison between the crude death rates for each of the Australian States, and the standardised rates as described above.

TABLE 59.—Comparison of "Crude" and "Standardised" Death Rates, 1921 and 1933.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
"Crude" Death Rate (Deaths at all ages combined per 1,000 of total population).							
1921	9.50	10.52	9.37	10.02	10.42	10.30	9.91
1933	8.58	9.59	8.84	8.44	8.64	9.60	8.92
"Standardised" Death Rate (Calculated as described in text.)							
1921	10.35	10.79	10.24	10.38	11.88	10.83	10.58
1933	8.52	8.74	9.10	7.66	8.74	8.86	8.62

Adequate data as to age distribution of population in individual States are not available since 1933 for the purpose of calculating standardised rates, but the standardised rate for Australia, in each of these years, indicates that there has not been any significant change.

#### *Death Rates—Age and Sex.*

Variations in the proportion of persons in the various age groups as shown in the chapter "Population" have a considerable bearing on the crude death rate of the whole population.

Again, the death rate of males is much higher than that of females. Consequently the increase in the proportion of females which has occurred in recent years is reflected in a corresponding decrease in the general rate.

In the following table death rates are given for each sex in the principal age groups during the three years around each census since 1881.

TABLE 60.—Specific Death Rates, All Causes, 1880 to 1934.

Age Group (years).	Death rate per 1,000 Living—All Causes.						Reduction per cent, 1880-82 to 1932-34.
	1880-82.	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.	
Males.							
0-4 ... ..	47.45	38.70	33.88	24.69	21.49	12.52	74
5-9 ... ..	3.13	3.51	2.16	2.05	1.85	1.41	55
10-14 ... ..	2.45	2.21	2.01	1.70	1.58	1.23	50
15-19 ... ..	3.85	3.33	3.43	2.43	2.17	1.68	56
20-24 ... ..	5.79	4.74	4.71	3.32	2.70	2.28	61
25-34 ... ..	7.64	6.50	5.56	4.31	3.75	2.49	67
35-44 ... ..	12.25	9.92	8.77	6.98	6.02	4.56	63
45-54 ... ..	18.99	16.23	14.56	12.45	10.86	9.56	50
55-64 ... ..	35.50	29.76	27.59	25.13	23.04	21.31	40
65-74 ... ..	67.23	61.89	60.13	55.69	51.61	49.26	27
75 and over ... ..	162.71	146.35	149.50	144.47	142.99	128.48	21
All Ages (Crude Rate)	16.72	14.24	12.90	11.59	10.72	9.60	43
Rate in 1880-82 = 100 ... ..	100	85	77	69	64	57	...
Females.							
0-4 ... ..	42.19	33.45	30.37	20.71	16.94	10.06	76
5-9 ... ..	2.77	3.26	1.99	1.76	1.64	1.18	57
10-14 ... ..	2.22	1.75	1.69	1.37	1.20	.83	63
15-19 ... ..	3.56	3.03	2.49	1.92	1.61	1.34	62
20-24 ... ..	5.31	4.14	3.82	3.17	2.43	2.03	62
25-34 ... ..	7.90	6.07	5.44	4.21	3.65	2.64	67
35-44 ... ..	11.10	8.86	7.53	5.96	4.88	3.99	64
45-54 ... ..	15.09	11.86	10.36	9.06	7.90	7.03	53
55-64 ... ..	26.83	22.56	20.02	17.60	15.73	14.21	47
65-74 ... ..	56.95	52.69	46.18	44.46	39.11	36.45	36
75 and over ... ..	138.58	142.28	134.48	125.29	124.53	107.40	22
All Ages (Crude Rate)	14.07	11.82	10.23	9.09	8.23	7.57	46
Rate in 1880-82 = 100 ... ..	100	84	73	65	58	54	...
Persons.							
0-4 ... ..	44.86	36.12	32.15	22.74	19.25	11.31	75
5-9 ... ..	2.95	3.39	2.08	1.91	1.75	1.30	56
10-14 ... ..	2.33	1.98	1.85	1.54	1.39	1.03	56
15-19 ... ..	3.70	3.18	2.96	2.18	1.90	1.51	59
20-24 ... ..	5.57	4.45	4.26	3.24	2.56	2.16	61
25-34 ... ..	7.75	6.32	5.50	4.26	3.70	2.56	67
35-44 ... ..	11.79	9.49	8.23	6.50	5.47	4.27	63
45-54 ... ..	17.54	14.48	12.79	10.97	9.46	8.33	52
55-64 ... ..	32.07	26.98	24.34	21.84	19.71	17.81	44
65-74 ... ..	63.37	58.07	54.43	50.61	45.81	43.02	32
75 and over ... ..	154.09	144.72	142.78	135.86	133.86	117.72	24
All Ages (Crude Rate)	15.52	13.13	11.63	10.40	9.50	8.60	45
Rate in 1880-82 = 100 ... ..	100	85	75	67	61	55	...

There was a steady reduction in the death rates throughout the period, the improvement being greatest at ages under 5 years, then in the group 25 to 34 years. The rates for females were reduced to a greater extent than the rates for males in every age group up to 75 years, except at ages 25 to 34 years. It is noticeable that the reduction at ages 10 to 14 years was 63 per cent. amongst females and only 50 per cent. amongst males, the difference in the rate of reduction amongst males and females being greatest in this group and at ages 65 to 74 years. Above that age improved conditions naturally had less effect.

Mortality is lowest at approximately 10 years of age.

*Expectation of Life.*

The effect of the improvement in death rates on the duration of life in Australia is indicated in the following statement, which shows the average expectation of life at specified ages according to the Australian mortality experience of the decades from 1881 to 1910 and the three years around the censuses of 1921 and 1933.

TABLE 61.—Expectation of Life, 1881 to 1934.

Age.	Males.					Females.				
	1881-90.	1891-1900.	1901-10.	1920-22.	1932-34.	1881-90.	1891-1900.	1901-10.	1920-22.	1932-34.
	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.
0	47.20	51.08	55.20	59.15	63.48	50.84	54.76	58.84	63.31	67.14
10	48.86	51.43	53.53	56.01	58.01	51.95	54.46	56.39	59.20	61.02
20	40.58	42.81	44.74	46.99	48.81	43.43	45.72	47.52	50.03	51.67
30	33.64	35.11	36.52	38.44	39.90	36.13	37.86	39.33	41.48	42.77
40	26.50	27.65	28.56	30.05	31.11	29.08	30.49	31.47	33.14	34.04
50	19.74	20.45	21.16	22.20	22.83	22.06	22.93	23.69	24.90	25.58
60	13.77	13.99	14.35	15.08	15.57	15.39	15.86	16.20	17.17	17.74
70	8.82	8.90	8.67	9.26	9.59	9.70	9.89	9.96	10.41	10.97
80	5.11	5.00	4.96	5.00	5.22	5.27	5.49	5.73	5.61	6.01
90	2.91	2.91	2.64	2.60	2.98	2.98	3.07	2.99	2.91	3.05
100	1.32	1.29	1.18	1.17	1.10	1.37	1.23	1.24	1.24	1.02

*Deaths—Metropolis and Remainder of the State.*

A summary of the annual deaths and death rates in the metropolis (*i.e.*, the area within existing boundaries) and in the remainder of the State since 1927 is shown on the next page, the deaths being allocated according to the usual residence of the deceased persons.

The death rate appears to be higher in the metropolis than in the country, but crude rates should be used with caution, owing to differences in the proportions of each sex and in the age composition of the population of these divisions.

TABLE 62.—Deaths, Metropolis and Country, 1927 to 1945.

Year.	Metropolis.		Remainder of the State.		New South Wales.	
	Average Annual Number of Deaths (excluding stillbirths).	Rate per 1,000 Living.	Average Annual Number of Deaths (excluding stillbirths).	Rate per 1,000 Living.	Average Annual Number of Deaths (excluding stillbirths).	Rate per 1,000 Living.
1927-30	9,386*	10·04*	8,880*	8·49*	18,266	9·23
1931-35	11,596*	9·40*	11,001*	8·04*	22,597	8·86
1936-40	13,277	10·35	12,458	8·66	25,735	9·46
1941-45	14,763	†	13,044	†	27,807	9·78
1938	13,461	10·50	12,644	8·74	26,105	9·59
1939	13,621	10·53	13,194	9·07	26,815	9·76
1940	13,686	10·49	12,457	8·49	26,143	9·43
1941	14,294	10·82	13,006	8·84	27,300	9·78
1942	15,404	11·36	13,815	9·45	29,219	10·37
1943	15,465	11·12	13,405	9·24	28,870	10·16
1944	14,300	†	12,352	†	26,652	9·28
1945	14,350	†	12,644	†	26,994	9·31

\* On basis of boundaries as existing from 1933.

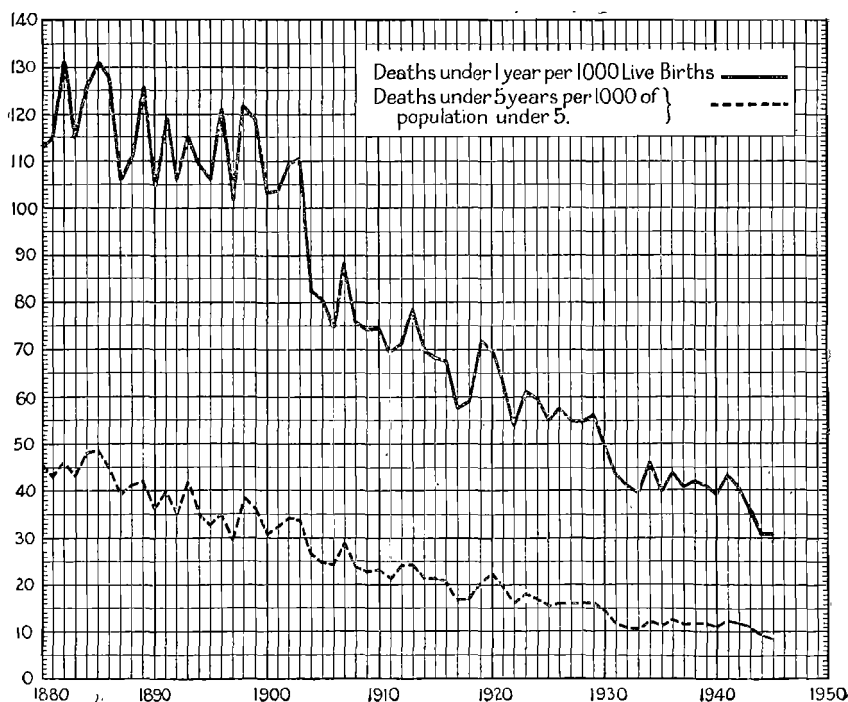
† Not available.

## THE MORTALITY OF INFANTS.

*Deaths of Children under 1 Year of Age (excluding Stillbirths).*

During the year 1945, the children who died before completing the first year of life (excluding stillbirths) numbered 1,889, equivalent to a rate of 30.6 per 1,000 live births.

## INFANTILE MORTALITY, 1860-1945.



The death rate is higher for male infants than for females, the rates in 1945 being 33.2 and 27.9 per 1,000 live births, respectively. The rates for each sex are shown in the following table in quinquennial periods since the year 1881.

TABLE 63.—Infantile Mortality, 1881 to 1945.

Period.	Males.		Females.		Total.	
	Annual Average Deaths under 1.	Rate per 1,000 Live Births.	Annual Average Deaths under 1.	Rate per 1,000 Live Births.	Annual Average Deaths under 1.	Rate per 1,000 Live Births.
1881-85	2,136	131.28	1,806	116.34	3,942	123.98
1886-90	2,358	122.27	1,961	106.72	4,319	114.68
1891-95	2,414	118.81	1,972	102.73	4,386	111.00
1896-00	2,274	118.51	1,890	105.44	4,164	113.40
1901-05	2,015	103.94	1,669	89.81	3,684	97.02
1906-10	1,854	84.09	1,478	70.59	3,332	77.51
1911-15	2,062	77.94	1,627	64.55	3,689	71.41
1916-20	1,918	72.54	1,447	57.64	3,365	65.28
1921-25	1,798	64.61	1,384	51.98	3,182	58.43
1926-30	1,655	60.41	1,266	48.83	2,921	54.78
1931-35	1,075	46.59	811	37.05	1,886	41.95
1936-40	1,109	45.52	854	36.64	1,963	41.18
1941-45	1,147	39.55	887	32.16	2,034	35.95
1941	1,264	47.89	1,000	39.47	2,264	43.77
1942	1,204	44.33	912	35.78	2,116	40.19
1943	1,161	39.68	911	32.53	2,072	36.18
1944	1,050	34.58	779	26.63	1,829	30.68
1945	1,055	33.16	834	27.94	1,889	30.63

In 1930 the rate was less than 50 deaths per 1,000 live births for the first time on record, and in 1933 it fell below 40 per 1,000. The rate in 1945 is the lowest ever recorded.

During the period reviewed the excess of the male rate over the female rate has always been pronounced, but it has grown greater. In the ten years 1880 to 1889 the excess was between 13 and 14 per cent., and in the five years 1941-45 it was 23 per cent.

The remarkable improvement which has taken place in the infantile mortality rate in the period covered by the table is due in a large degree to the measures adopted to combat preventable diseases by health laws and by education, and to the establishment of baby health centres and other means to promote the welfare of mothers and young children. Particulars relating to these are published in chapter "Social Condition" of this Year Book.

*Infantile Mortality by Age.*

Of the total number of deaths of infants under 1 year of age in 1945, 60 per cent. occurred within a week of birth, 71 per cent. within the first month, and 79 per cent. within three months. The following statement shows the number of deaths at various ages under 1 year in the metropolis and in the whole State and the rates per 1,000 live births.

TABLE 64.—Infantile Mortality, Metropolis and State, Age, 1943 to 1945.

Age at Death.	Metropolis.						New South Wales.					
	Number of Deaths.			Deaths per 1,000 Live Births.			Number of Deaths.			Deaths per 1,000 Live Births.		
	1943.	1944.	1945.	1943.	1944.	1945.	1943.	1944.	1945.	1943.	1944.	1945.
<b>Weeks—</b>												
Under one	463	473	505	17·16	16·70	17·12	1,123	1,091	1,127	19·61	18·30	18·29
One ...	43	39	55	1·59	1·38	1·86	137	126	127	2·39	2·12	2·06
Two ...	26	21	28	·96	·74	·95	57	49	53	1·00	·82	·86
Three ...	22	15	26	·82	·53	·88	48	43	37	·84	·72	·60
Total under one month	554	548	614	20·53	19·35	20·81	1,365	1,309	1,344	23·84	21·06	21·80
<b>Months—</b>												
One ...	58	39	43	2·15	1·38	1·46	117	87	100	2·04	1·46	1·62
Two ...	34	20	17	1·26	·71	·58	87	42	50	1·52	·71	·81
Three ...	41	19	18	1·52	·67	·61	77	56	40	1·35	·94	·79
Four ...	31	18	16	1·15	·64	·54	73	40	48	1·27	·67	·78
Five ...	18	18	24	·67	·64	·81	46	46	64	·80	·77	1·04
Six ...	25	23	12	·92	·81	·41	57	52	41	1·00	·87	·68
Seven ...	19	12	21	·70	·42	·71	47	39	47	·82	·65	·76
Eight ...	21	13	10	·78	·46	·34	54	37	33	·94	·62	·53
Nine ...	23	16	9	·85	·56	·31	56	51	38	·98	·86	·62
Ten ...	21	11	13	·78	·39	·44	47	31	37	·82	·52	·60
Eleven ...	15	12	16	·55	·42	·54	46	39	38	·80	·65	·62
Total under one year...	860	749	813	31·86	26·45	27·56	2,072	1,829	1,889	36·18	30·68	30·63

Although there has been a remarkable improvement in the mortality rates after the first week of life, only a slight improvement has occurred in the death rate during the first week of life. But the ratio of neo-natal deaths (under one week) to live births does not provide a valid basis for determining changes in mortality during this period, when the deaths are due almost exclusively to pre-natal causes which are also a common source of stillbirths. It is probable that under improved conditions of pre-natal care and obstetric technique many infants who formerly would have been stillborn are now born alive, but die within a week of birth. Available information regarding stillbirths (see Table 49) suggests that the proportion of stillbirths is declining and the combination of stillbirths and neo-natal deaths (as in Table 72) shows that there has been some saving of life among the new born.

More skilful attention after birth may decrease the number of infants who die from pre-natal causes; but it is recognised that the rate of mortality among infants in the first week of life will not be reduced appreciably except through increased pre-natal care, and considerable attention is being given to the care and instruction of expectant mothers.

The following table shows the rates of mortality among infants in age groups during the first year of life in quinquennial periods since 1901, and annually since 1938:—

TABLE 65.—Infantile Mortality, Age, 1901 to 1945.

Period.	Rate of Mortality per 1,000 Live Births among Children aged—							
	Under 1 week.	1 week and under 1 month.	Total under 1 month.	1 month and under 3 months.	Total under 3 months.	3 months and under 6.	6 months and under 12.	Total under 1 year.
1901-05	21·84	11·27	33·11	18·26	51·37	20·93	24·72	97·02
1906-10	21·73	9·79	31·52	13·31	44·83	15·02	17·66	77·51
1911-15	23·08	8·79	31·87	10·76	42·63	12·09	16·69	71·41
1916-20	24·28	8·18	32·46	9·47	41·93	9·68	13·67	65·28
1921-25	22·94	7·30	30·24	8·33	38·57	8·27	11·59	58·43
1926-30	23·31	6·56	29·87	6·39	36·26	7·08	11·44	54·78
1931-35	22·67	5·10	27·77	3·90	31·67	3·64	6·64	41·95
1936-40	22·77	4·97	27·74	3·46	31·20	3·48	6·50	41·18
1941-45	20·02	4·33	24·35	3·22	27·57	3·32	5·06	35·95
1938	23·42	4·48	27·90	3·80	31·70	3·46	6·68	41·84
1939	22·96	4·48	27·44	2·48	29·92	3·56	7·54	41·02
1940	21·12	4·46	25·58	3·85	29·43	3·62	5·97	39·02
1941	23·55	5·97	29·52	4·23	33·75	4·18	5·84	43·77
1942	20·97	4·52	25·49	3·97	29·46	4·27	6·46	40·19
1943	19·61	4·23	23·84	3·56	27·40	3·42	5·36	36·18
1944	18·30	3·66	21·96	2·16	24·12	2·38	4·18	30·68
1945	18·28	3·52	21·80	2·43	24·23	3·27	3·13	30·63

The improvement has been greatest in the age group 6-12 months, then at ages 3-6 months and 1-3 months. There has been substantial improvement also in the group 1 week and under 1 month.

*Infantile Mortality in Metropolis and Remainder of State.*

The number of deaths of children under one year of age in the metropolis in 1945 was 813 or 27·56 per 1,000 live births, and in the remainder of the State 1,076 or 33·46 per 1,000 live births.

The following table shows the number of deaths of children under one year of age in the metropolis and in the remainder of the State, and the rate per 1,000 live births since 1927. The basis of the tabulation as to locality is the usual residence of the mother:—

TABLE 66.—Infantile Mortality, Metropolis and Country, 1927 to 1945.

Year.	Metropolis.		Remainder of State.		New South Wales.	
	Average Annual Deaths under 1.	Rate per 1,000 Live Births.	Average Annual Deaths under 1.	Rate per 1,000 Live Births.	Average Annual Deaths under 1.	Rate per 1,000 Live Births.
1927-30	970	53·14	1,339	54·78	2,309	54·08
1931-35	702	40·11	1,184	43·12	1,886	41·95
1936-40	716	38·18	1,247	43·12	1,963	41·18
1941-45	848	32·52	1,186	38·87	2,034	35·95
1938	714	38·47	1,266	44·02	1,980	41·84
1939	663	31·31	1,306	45·54	1,969	41·02
1940	758	38·01	1,169	39·71	1,927	39·02
1941	942	42·12	1,322	45·02	2,264	43·77
1942	877	37·77	1,239	42·10	2,116	40·19
1943	860	31·86	1,212	40·03	2,072	36·18
1944	749	26·45	1,080	34·51	1,829	30·68
1945	813	27·56	1,076	33·46	1,889	30·63

In the following table the rates of infantile mortality in the Australian States, in New Zealand, and in various other countries are compared. The rates quoted for 1943, being for a single year (and therefore likely to be affected by transient factors) should be read in conjunction with those for the period 1931-35:—

TABLE 67.—Infantile Mortality, States and Countries.

State or Country.	Deaths under One Year per 1,000 Live Births.		Country.	Death under one Year per 1,000 Live Births.	
	Average, 1941-45.	1945.		Average, 1931-35.	1943.
New Zealand ... ..	29·53	27·99	*South Africa ... ..	63	48
South Australia ... ..	32·95	28·08	Eire ... ..	68	80
Western Australia ... ..	35·30	29·52	Denmark ... ..	71	45
Queensland ... ..	34·31	29·76	France ... ..	73	75
Victoria ... ..	34·50	28·03	Germany ... ..	74	†
New South Wales ... ..	35·95	30·03	Canada ... ..	75	54
Tasmania ... ..	39·31	27·48	Northern Ireland ... ..	78	78
Australia ... ..	34·97	29·38	Scotland ... ..	81	65
			Belgium ... ..	82	67
	Average, 1931-35.	1943.	Argentina ... ..	94	78
			Italy ... ..	105	†
			Spain ... ..	113	99
New Zealand ... ..	39	31	Japan ... ..	120	†
Australia ... ..	41	36	Czechoslovakia ... ..	130	†
New South Wales ... ..	42	36	Mexico ... ..	134	117
Norway ... ..	45	†	Hungary ... ..	157	131
Netherlands ... ..	45	40	Ceylon ... ..	182	132
Switzerland ... ..	48	40	Rumania ... ..	182	†
Sweden ... ..	50	29			
United States ... ..	59	40			
England and Wales ... ..	62	49			

\* White people only.

† Not available.

The rate of infantile mortality in New Zealand is lower than in any of the Australian States. The rates for Australasia generally are greatly superior to those prevailing in most other countries for which comparable records are available. In comparing the rates for various countries, allowance should be made for wide differences in climate and economic conditions.

### *Causes of Infantile Mortality*

A table published annually in the Statistical Register shows the rates of infantile mortality from each of the principal causes in the last forty-seven years. This indicates that there has been a great decline in the mortality from diarrhoea and enteritis and other digestive diseases, nervous diseases, tubercular diseases, and bronchitis, accident, and general diseases. There has also been a decline in congenital debility, but a proportionate increase in deaths from malformation, premature birth, and diseases of early infancy due to the deaths of children born alive who, under conditions prevailing in earlier years, would have been stillborn. The mortality from epidemic diseases fluctuates considerably with a tendency to decline.

The following table shows the incidence of mortality caused by the principal diseases among infants at various periods during the first year of life



in 1944 and 1945, showing the experience in the metropolis in comparison with that in the whole State:—

TABLE 68.—Infantile Mortality—Causes of Death, 1944 and 1945.

Cause of Death.	Deaths of Children under One Year of Age per 1,000 Live Births.							
	Metropolis.				State.			
	Under 1 week.	1 week and under 1 month.	1 month and under 1 year.	Total.	Under 1 week.	1 week and under 1 month.	1 month and under 1 year.	Total.
1944.								
Tuberculosis ... ..	...	...	·21	·21	...	...	·15	·15
Syphilis ... ..	·04	...	·11	·15	·02	...	·06	·08
Other Parasitic and Infectious Diseases	...	·04	·88	·92	...	·03	·92	·95
Meningitis ... ..	...	·07	·25	·32	...	·03	·27	·30
Convulsions ... ..	...	·04	...	·04	·02	·05	·05	·12
Bronchitis ... ..	·04	...	·21	·25	·02	·02	·18	·22
Pneumonia ... ..	·53	·28	1·55	2·36	·37	·30	2·18	2·85
Diarrhoea and Enteritis ... ..	...	·14	·46	·60	...	·15	·86	1·01
Malformations ... ..	1·94	·78	1·34	4·06	2·14	·74	1·53	4·41
Congenital Debility ... ..	·18	·10	·11	·39	·55	·34	·17	1·06
Premature Birth ... ..	8·33	·53	·21	9·07	9·09	·87	·22	10·18
Injury at Birth ... ..	3·21	·21	·07	3·49	3·32	·29	·10	3·71
Other Diseases of early Infancy ... ..	2·08	·21	·18	2·47	2·47	·50	·17	3·14
All Other ... ..	·35	·25	1·52	2·12	·30	·34	1·86	2·50
Total ... ..	16·70	2·65	7·10	26·45	18·30	3·66	8·72	30·68
1945.								
Tuberculosis ... ..	...	...	·03	·03	...	...	·07	·07
Syphilis ... ..	...	...	...	...	·02	...	·03	·05
Other Parasitic and Infectious Diseases	·03	·14	1·05	1·22	·02	·08	1·23	1·33
Meningitis ... ..	·07	...	·37	·44	·03	...	·41	·44
Convulsions ... ..	...	·07	·03	·10	·03	·03	·11	·17
Bronchitis ... ..	...	·03	·03	·06	...	·02	·06	·08
Pneumonia ... ..	·78	·61	1·43	2·82	·50	·49	2·04	3·03
Diarrhoea and Enteritis ... ..	...	...	·44	·44	...	·05	1·10	1·15
Malformations ... ..	1·97	·68	1·87	4·52	2·17	·66	1·74	4·57
Congenital Debility ... ..	·30	·17	...	·47	·55	·24	·10	·89
Premature Birth ... ..	8·27	·95	·17	9·39	8·81	·99	·16	9·96
Injury at Birth ... ..	2·95	·37	·07	3·39	3·20	·31	·04	3·55
Other Diseases of early Infancy ... ..	2·58	·40	·07	3·05	2·66	·41	·16	3·23
All Other ... ..	·17	·27	1·19	1·63	·29	·24	1·58	2·11
Total ... ..	17·12	3·69	6·75	27·56	18·28	3·52	8·83	30·63

In the State in 1945, 95 per cent. of the deaths during the first week after birth and 73 per cent. of the deaths which occurred during the first year after birth were due to exclusively pre-natal causes, and diseases of early infancy or syphilis. Deaths from these causes during the first year of life represented 21.13 per 1,000 live births during the year. The incidence of diarrhoea and enteritis was comparatively light among children under the age of one month.

*Deaths of Ex-nuptial Children under 1 year.*

During 1945 there were 58,936 nuptial and 2,726 ex-nuptial children born alive. During the same period the deaths of nuptial children under 1 year of age numbered 1,749 and of ex-nuptial children 140.

The infantile mortality rate of ex-nuptial children was 73 per cent. higher than the rate for nuptial children, partly owing to premature birth, infantile debility and inherited diseases, but to an equally great extent to causes arising from neglect. The mortality rates from various causes among ex-nuptial children are shown annually in the Statistical Register.

How these combined causes operate to produce a comparatively high death rate among ex-nuptial children is shown in the following table which relates to the year 1945 and the quinquennium 1941-45:—

TABLE 69.—Infantile Mortality, Nuptiality and Age, 1941 to 1945.

Age at Death.	Deaths per 1,000 Live Births, 1945.				Deaths per 1,000 Live Births, 1941-1945			
	Nuptial.	Ex-nuptial.		Total.	Nuptial.	Ex-nuptial.		Total.
		Rate.	Per cent. of Nuptial Rate.			Rate.	Per cent. of Nuptial Rate.	
Under 1 week ...	17·82	28·25	159	18·28	19·56	30·55	156	20·02
1 week ...	2·02	2·94	146	2·06	2·19	4·04	184	2·26
2 weeks...	·86	·73	84	·86	1·08	2·07	192	1·12
3 „ ...	·53	2·20	415	·60	·93	1·29	139	·95
Total— under 1 month	21·23	34·12	161	21·80	23·76	37·95	160	24·35
1 month ...	1·55	3·31	214	1·62	1·92	3·18	166	1·98
2 months ...	·83	·37	45	·81	1·20	2·24	187	1·24
3 „ ...	·72	2·57	362	·79	1·18	2·50	212	1·24
4 „ ...	·68	2·93	431	·78	1·02	2·41	236	1·08
5 „ ...	·95	2·93	308	1·04	·97	1·81	187	1·01
6 „ ...	·59	2·20	373	·66	·90	2·06	229	·94
7 „ ...	·76	·73	96	·76	·85	·86	101	·85
8 „ ...	·56	...	...	·53	·87	·86	99	·87
9 „ ...	·59	1·10	186	·62	·81	·86	106	·81
10 „ ...	·59	·73	124	·60	·77	·95	123	·77
11 „ ...	·63	·37	59	·62	·82	·69	84	·81
Total— under 1 year	29·68	51·36	173	30·63	35·07	56·37	161	35·95

The number of ex-nuptial children who die during one year is comparatively small, consequently the rates of mortality for such children based on the experience of a single year are unstable.

A more reliable comparison is obtained by using figures based upon the quinquennial period. The experience of the five years 1941-45 shows that the largest proportional excess of deaths of ex-nuptial children over those of nuptial children is not immediately after birth, but usually two months or more later. The mortality of ex-nuptial children exceeded that of nuptial children by 60 per cent. in the first month of life, by 66 per cent. in the second, by 87 per cent. in the third, 112 per cent. in the fourth, and 136 per cent. in the fifth. The excess of the ex-nuptial rate was considerable also in later months.

The following table shows the number of births and deaths and the rate per 1,000 live births of ex-nuptial as compared with those of nuptial children in New South Wales since 1901.

TABLE 70.—Deaths under 1 Month and 1 Year, 1901 to 1945.

Period.	Total Live Births.		Deaths under 1 month.				Deaths under 1 year.			
			Nuptial.		Ex-Nuptial.		Nuptial.		Ex-Nuptial.	
	Nuptial.	Ex-Nuptial.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.
1901-05	176,555	13,289	*	*	*	*	15,273	86.51	3,146	236.74
1906-10	200,408	14,562	6,000	29.94	775	53.22	13,997	69.84	2,666	183.08
1911-15	244,160	14,144	7,496	30.70	737	52.11	16,261	66.60	2,184	154.41
1916-20	244,887	12,857	7,690	31.40	678	52.73	15,140	61.82	1,686	131.13
1921-25	258,838	13,407	7,653	29.57	580	43.26	14,549	56.21	1,359	101.36
1926-30	253,183	13,409	7,338	28.98	626	46.69	13,222	52.22	1,382	103.07
1931-35	213,613	11,222	5,726	26.81	518	46.16	8,612	40.32	819	72.98
1936-40	228,345	10,049	6,148	26.92	466	46.37	9,087	39.80	729	72.54
1941-45	271,295	11,620	6,446	23.76	441	37.95	9,515	35.07	655	56.37
1941	49,694	2,035	1,435	28.88	92	45.21	2,125	42.76	139	68.30
1942	50,602	2,045	1,262	24.94	80	39.12	1,982	39.17	134	65.53
1943	55,005	2,260	1,272	23.13	93	41.15	1,953	35.51	119	52.65
1944	57,058	2,554	1,226	21.49	83	32.50	1,706	29.90	123	48.16
1945	58,936	2,726	1,251	21.23	93	34.12	1,749	29.68	140	51.36

\* Not available.

The table shows that the ex-nuptial death rates are uniformly high compared with the nuptial rates, but they have improved considerably in the period covered by the table. In 1901, one out of every four ex-nuptial children died within a year of birth; the rate in 1945 was one in nineteen.

#### *Deaths of Children under 5 years.*

Apparently there has been a general improvement in the death rate of all groups of children under 5 years of age, though the improvement has not been so marked at ages over 1 year as in the rates of infantile mortality.

The following table shows the mortality of children under 5 years of age:—

TABLE 71.—Deaths under 5 Years, 1891 to 1945.

Period.	Deaths under 5 years.		Period.	Deaths under 5 years.	
	Average Annual Number.	Rate per 1,000 Living.		Average Annual Number.	Rate per 1,000 Living.
1891-95	6,174	36.74	1936-40	2,593	11.79
1896-00	5,558	33.85	1941-45	2,621	10.58
1901-05	4,910	30.25			
1906-10	4,419	24.34			
1911-15	5,002	22.55			
1916-20	4,708	19.31	1941	2,897	12.47
1921-25	4,246	17.12	1942	2,780	11.71
1926-30	3,995	15.71	1943	2,678	10.93
1931-35	2,610	11.11	1944	2,368	9.25
			1945	2,382	8.88

The rate of mortality in the quinquennium 1941-45 compared with that of 1891-95, represents an annual saving of 28 lives in every 1,000 children under 5 years of age in the State.

Children are more susceptible to the attacks of disease in the earlier years of life than later, and the death rate decreases steadily until the age of 10 years is reached. The high death rate for preventable diseases in earlier years was due partly to parental ignorance of the proper food or treatment required, and improvement in the rate may be attributed in a large measure to more widespread knowledge of infant hygiene and mothercraft.

### *Infantile Mortality and Stillbirths.*

As pre-natal causes are a common factor in both stillbirth and the mortality of infants subsequent to birth, it is of interest to note the combined rate for stillbirths and deaths of children who were born living.

In 1945 there were 1,540 stillbirths and 1,889 deaths under one year of age, making a total loss of 3,429 infants out of 63,202 live births and stillbirths. This represents a rate of 54.25 per 1,000 of all births.

The rate on this basis was 51.01 in the metropolis and 57.23 in the remainder of the State—the difference between the rates being a little greater than the difference in the respective death rates of live-born children only.

Particular significance is attached to the combined rate in respect of neo-natal deaths (deaths of live-born children within one week of birth) and stillbirths. This is shown in the following table:—

TABLE 72.—Infantile Mortality and Stillbirths, 1936-1945.

Year.	Mortality per 1,000 Live Births and Stillbirths Combined.					
	Deaths under one week plus Stillbirths.			Deaths under one year plus Stillbirths.		
	Metropolis.	Remainder of State.	New South Wales.	Metropolis.	Remainder of State.	New South Wales.
1936 .....	53.43	52.30	52.74	72.13	71.88	71.98
1937 .....	52.43	51.39	51.79	68.97	69.24	69.13
1938 .....	51.23	53.98	52.90	68.15	72.46	70.77
1939 .....	47.02	51.80	49.88	61.60	71.38	67.44
1940 .....	46.94	47.07	47.02	64.88	64.15	64.45
1941 .....	48.96	51.53	50.42	69.29	70.69	70.08
1942 .....	46.17	46.81	46.52	63.11	66.93	65.24
1943 .....	42.38	45.57	44.07	56.71	63.36	60.22
1944 .....	40.29	44.63	42.57	49.80	59.02	54.64
1945 .....	40.82	43.46	42.20	51.01	57.23	54.25

The year 1936 is the first for which figures are available on this basis.

### CAUSES OF DEATH.

The classification used in tabulating causes of death is in accordance with the International List of Causes of Death, with slight modification for use throughout Australia. The fifth decennial revision of the list was first used in 1940.

The complete list of causes of death is published in the Statistical Register of New South Wales, which shows the number of deaths from each cause according to age, sex, and month of occurrence.

The table published below is a summary of the principal individual causes of death in 1945, compared with the average annual number in the period 1940-44, adjusted to the population of the year 1945. The proportion to the total in the five years 1941-45 is also shown:—

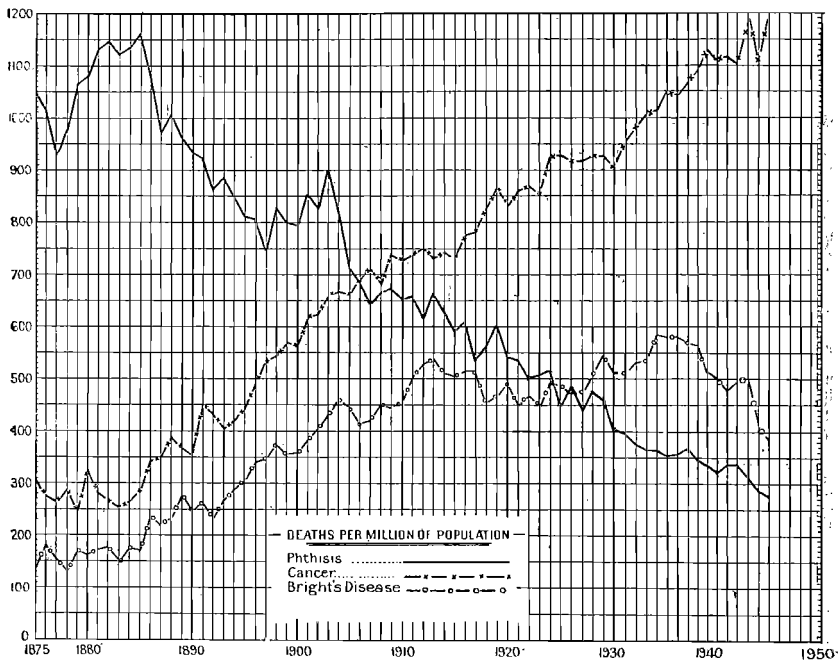
TABLE 73.—Causes of Death, 1945.

Causes of Death.	Adjusted, Average 1940-44.	Number, 1945.	Proportion of Total, 1941-45.	Causes of Death.	Adjusted Average, 1940-44.	Number, 1945.	Proportion of Total, 1941-45.
			per cent.				per cent.
Typhoid and Paratyphoid Fevers ...	7	2	·02	Infantile Convulsions ...	17	17	·06
Cerebro-spinal (Meningococcal) Meningitis ...	76	29	·28	Other Diseases of the Nervous System ...	373	371	1·34
Scarlet Fever ...	11	6	·03	Diseases of the Heart ...	8,591	8,672	30·96
Whooping-cough ...	81	40	·24	Arteriosclerosis and other Diseases of the Arteries ...	557	428	1·87
Diphtheria ...	91	84	·33	Other Diseases of the Circulatory System ...	71	83	·27
Erysipelas ...	9	3	·03	Bronchitis ...	264	219	·92
Tetanus ...	20	27	·07	Pneumonia ...	1,462	1,128	4·93
Tuberculosis of Respiratory System ...	925	803	3·17	Other Diseases of the Respiratory System ...	302	295	1·08
Tuberculosis of Meninges and Central Nervous System ...	26	22	·09	Diseases of the Stomach ...	164	138	·56
Other Tuberculous Diseases ...	49	41	·17	Diarrhoea and Enteritis (under 2 years of age) ...	164	112	·52
Dysentery ...	27	19	·09	Diarrhoea and Enteritis (over 2 years of age) ...	125	104	·41
Syphilis ...	145	117	·46	Appendicitis ...	185	120	·60
Influenza—with respiratory complications specified ...	96	36	·30	Hernia, Intestinal Obstruction ...	240	250	·88
Influenza—without respiratory complications specified ...	62	33	·20	Cirrhosis of the Liver ...	106	74	·34
Measles ...	36	5	·12	Peritonitis ...	27	19	·09
Acute Poliomyelitis and Acute Poliоencephalitis notifiable ...	3	46	·04	Other Diseases of the Digestive System ...	350	319	1·21
Acute Infectious Encephalitis (Lethargic or Epidemic) ... notifiable ...	3	3	·01	Nephritis ...	1,378	1,117	4·62
Other Infective and Parasitic Diseases ...	103	82	·34	Other Diseases of the Genito-Urinary System ...	415	229	1·39
Cancer ...	3,286	3,430	11·67	Criminal Abortion ...	33	17	·10
Diabetes Mellitus ...	556	524	1·94	Puerperal Septicæmia and Post-abortive Septicæmia ...	38	13	·10
Other General Diseases ...	438	399	1·48	Puerperal Thrombophlebitis, Embolism and Sudden Death (Sepsis) ...	20	13	·07
Vitamin Deficiency Diseases ...	3	2	·01	Other Puerperal Diseases ...	116	96	·40
Diseases of the Blood ...	222	221	·79	Congenital Malformations ...	312	321	1·13
Chronic Poisoning and Intoxication ...	39	30	·13	Congenital Debility ...	93	55	·31
Encephalitis & Meningitis ...	131	94	·44	Premature Birth ...	663	614	2·33
Cerebral Haemorrhage ...	1,852	2,071	6·80	Other Diseases Peculiar to the First Year of Life ...	421	418	1·49
Cerebral Embolism, Thrombosis, Softening and Hemiplegia ...	760	793	2·77	Senility ...	1,036	1,007	3·73
Apoplexy and other Intracranial Effusions ...	15	10	·03	Suicide ...	260	254	·87
				Accident ...	1,353	1,240	4·00
				Other Violence ...	43	54	·14
				All other ...	183	138	·60
				Total ...	28,425	26,994	100·00

The general experience in New South Wales is that mortality from tuberculosis, bronchitis, diarrhoea and enteritis, diphtheria, and typhoid fever is decreasing and, on the basis of crude death rates, the mortality from diseases of the heart, cancer, diabetes and nephritis is increasing.

The figures in the foregoing table cannot be compared as absolute numbers of the same relative importance because of the limitations of a system of classification depending upon a large number of independent observers with varying degrees of diagnostic equipment, and because the age incidence is very different for the several diseases. Some diseases of the heart and diseases of the arteries, etc., affect persons of advanced years, and from the standpoint of rate of natural increase are relatively less important than are diseases like tuberculosis and pneumonia, which cause heavy mortality between ages 20 and 65.

### DEATH RATES—PRINCIPAL DISEASES—1875-1945.



Interesting features of the table are that 6.25 per cent. of all deaths in the quinquennium of 1941-45 were due to the following diseases, which are generally diseases of early childhood:—Diarrhœa and enteritis (under 2 years), malformations, diseases of infancy, whooping-cough, convulsions of infants, measles, and poliomyelitis. Of the remaining deaths, more than half were due to five major causes, diseases of the heart, cancer, pneumonia, tuberculosis and nephritis. Deaths from violence represented 5.61 per cent. of the total.

In the pages which follow, the experience in respect of a number of individual diseases is traced. Where a lengthy period is covered, due allowance must be made for the effect of improvements in methods of diagnosis and classification and the general advance of medical knowledge. In some cases these factors have exercised a considerable influence upon the trend of the figures.

Apart from the records obtained by the compulsory notification by medical practitioners of certain infectious diseases, reliable statistics are not available to show the number of cases of the various diseases occurring annually, but statistics have been collected of the occurrence of communicable diseases among school children since 1913. These show that epidemics of such diseases as measles, whooping-cough, scarlet fever, and diphtheria are of periodical recurrence, and, from time to time, assume large proportions. A large proportion of the deaths from these diseases are among children under school age, but the rate of mortality from them rises and falls with the recurrence of epidemics among school children.

### *Typhoid Fever.*

The number of cases of typhoid fever is small in comparison with the experience of earlier years. Only 148 cases were notified in the last five years, as compared with 16,406 in the years 1899 to 1903. The number of deaths was 25 and 1,787 in the respective periods.

The decrease may be attributed to the operation of the Dairies Supervision Act, which became law in 1889, the extension of sewerage services and greater efficiency in sanitary inspection and garbage disposal.

The compulsory notification by medical practitioners of cases of typhoid fever has been in force since the 1st January, 1898.

The number of cases notified and deaths from typhoid fever, and the equivalent annual rates in the last thirteen years are stated below:—

TABLE 74.—Typhoid Fever, 1933 to 1945.

Period.	Cases Notified.		Deaths.					
	Number.	Rate per 10,000 living.	Males.		Females.		Total.	
			Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.
1933-37	752	·57	72	·10	32	·05	104	·08
1938-42	289	·21	43	·06	13	·02	56	·04
1941	40	·14	6	·04	2	·01	8	·03
1942	31	·11	5	·04	1	·01	6	·02
1943	24	·08	4	·03	...	...	4	·01
1944	24	·08	3	·02	2	·01	5	·02
1945	29	·10	...	...	2	·01	2	·01

### *Smallpox.*

There have been no deaths from smallpox in New South Wales since the year 1915.

Vaccination is not compulsory in this State, and the precaution is rarely adopted unless epidemics threaten, as in the year 1913, when about 425,000 persons voluntarily submitted themselves to vaccination.

*Measles.*

Although measles is a common complaint, the resultant mortality is comparatively very small. The following statement shows the deaths from this cause, and the rate for each sex in recent years:—

TABLE 75.—Measles, 1933 to 1945.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1933-37	101	·15	91	·14	192	·15
1938-42	131	·19	129	·19	260	·19
1941	5	·04	3	·02	8	·03
1942	63	·45	67	·48	130	·46
1943	8	·06	5	·04	13	·05
1944	2	·01	2	·01	4	·01
1945	3	·02	2	·01	5	·02

Measles is a disease chiefly affecting children, and is periodically epidemic.

*Scarlet Fever.*

In 1945 the number of deaths from scarlet fever was 6, equivalent to a rate of 0.02 per 10,000 of the population. Of these none occurred in the metropolis, and 6 in the remainder of the State. The rate of mortality from this cause is very low, owing to the effectiveness of treatment. The number of cases notified and the deaths from scarlet fever and the equivalent annual rates have been as follows:—

TABLE 76.—Scarlet Fever, 1899 to 1945.

Period.	Cases Notified.		Deaths.					
	Number.	Rate per 10,000 living.	Males.		Females.		Total.	
			Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.
1899-1903	10,940	15·97	84	·23	114	·35	198	·29
1904-08	14,239	19·16	88	·23	91	·26	179	·24
1909-13	13,220	15·70	41	·09	57	·14	98	·12
1914-18	20,864	21·95	112	·23	161	·35	273	·29
1919-23	6,732	6·39	34	·06	38	·07	72	·07
1924-28	25,119	21·38	142	·24	185	·32	327	·28
1929-33	23,260	18·21	115	·18	165	·26	280	·22
1934-38	13,457	10·08	47	·07	45	·07	92	·07
1939-43	15,130	10·83	21	·03	33	·05	54	·03
1941	3,384	12·12	...	...	6	·04	6	·02
1942	1,576	5·59	5	·04	4	·03	9	·03
1943	3,940	13·87	6	·04	7	·05	13	·05
1944	5,618	19·57	5	·03	6	·04	11	·04
1945	6,977	24·07	2	·01	4	·03	6	·02

Like measles, scarlet fever is an epidemic disease which mainly affects children, the rate generally being somewhat higher for females than for males. Of the deaths during 1945, 4 were of children under 10 years of



age, viz., 2 males and 2 females. Though not nearly so prevalent as formerly, it recurs sporadically.

*Whooping-cough.*

Whooping-cough is another disease which mainly affects children, and to which, like scarlet fever, females are more susceptible than males. The number of deaths and rates of mortality for each sex since 1899 are shown below.

TABLE 77.—Whooping-cough, 1899 to 1945.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1899-1903	573	1·59	726	2·23	1,299	1·90
1904-08	369	·95	445	1·25	814	1·10
1909-13	377	·86	436	1·09	813	·97
1914-18	335	·69	382	·82	717	·75
1919-23	440	·82	497	·96	937	·89
1924-28	390	·65	462	·80	852	·72
1929-33	285	·44	363	·58	648	·51
1934-38	285	·42	356	·54	641	·48
1939-43	182	·26	212	·30	394	·28
1941	59	·42	55	·40	114	·41
1942	23	·16	31	·22	54	·19
1943	50	·35	58	·41	108	·38
1944	8	·06	12	·08	20	·07
1945	18	·12	22	·15	40	·14

Whooping-cough is a recurring ailment of infancy and childhood. The table shows that mortality from this cause has been reduced greatly, although epidemic outbreaks still occur. Owing to the seasonal nature of the disease the figures for calendar years do not cover each epidemic completely. It is shown in Table 103 that whooping-cough is most fatal during the months of January and August to December.

Records kept since 1913 show that epidemics of whooping-cough among school children are only second in magnitude to those of measles.

*Diphtheria.*

The death rate from diphtheria was very high in the earlier years shown in the table below, but the death rate fell sharply after the introduction of diphtheria antitoxin in 1894.

Compulsory notification by medical practitioners of cases of diphtheria was instituted from 1st January, 1898, but in the first ten years the notifications were not complete.

Diphtheria caused 84 deaths in 1945, viz., 21 in the metropolitan area and 63 in the remainder of the State. The following table shows the number of cases notified and deaths and the equivalent annual rates since 1884:—

TABLE 78.—Diphtheria, 1884 to 1945.

Period.	Cases notified.		Deaths.					
			Males.		Females.		Total.	
	Number	Rate per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.
1884-88	*	*	1,069	4·04	980	4·51	2,049	4·25
1889-93	*	*	1,433	4·65	1,399	5·36	2,832	4·98
1894-98	*	*	712	2·10	710	2·39	1,422	2·24
1899-1903	4,360	6·36	310	·86	299	·92	609	·89
1904-08	7,298	9·82	367	·95	338	·95	705	·95
1909-13	24,012	28·51	604	1·37	640	1·59	1,244	1·48
1914-18	29,213	30·74	659	1·36	682	1·47	1,341	1·41
1919-23	22,297	21·17	583	1·09	509	·99	1,092	1·04
1924-28	18,841	16·03	448	·75	394	·68	842	·72
1929-33	20,979	16·42	434	·67	454	·72	888	·70
1934-38	26,334	19·72	467	·69	439	·66	906	·68
1939-43	12,737	9·12	283	·40	285	·41	565	·40
1941	3,064	10·98	60	·43	61	·44	121	·43
1942	1,454	5·16	44	·28	39	·28	79	·28
1943	2,268	7·98	49	·34	50	·35	99	·35
1944	1,402	4·88	30	·21	39	·27	69	·24
1945	1,478	5·10	43	·30	41	·28	84	·29

\* Notifiable throughout the State from 1st January, 1898.

Mortality from diphtheria was heaviest during two lengthy periods, viz., from 1881 to 1898, and omitting the year 1919, from 1909 to 1921, although the rate was much lower in the latter period than in the former.

The experience of the quinquennial period 1941-1945 shows the disease to be most fatal during the months of May, June and July. Ninety-three per cent. of the persons who died from diphtheria during 1945 were under 10 years of age, and 65 per cent. were under 5 years of age.

Measures are taken by the Department of Public Health, in co-operation with municipal and shire councils, to encourage the immunisation of children at ages 1 to 14 years. The Department pays the cost of the anatoxin used at the councils' depots, and certain other expenses. Immunisation is voluntary, and children may be treated at public depots or by private medical practitioners.

*Influenza.*

During 1945 there were 69 deaths due to influenza, the rate of mortality being 56 per cent. lower than the average of the previous five years. There was a severe epidemic in 1919, when 6,387 persons died from the disease. An analysis of the experience of that year is contained in the 1920 issue of the Year Book. The mortality was high in 1923, 1929 and 1935.

In the following table the deaths at each outbreak are shown together with those in the intervening periods:—

TABLE 79.—Influenza, 1875 to 1945.

Period.	Deaths.			Annual Rate per 10,000 living.
	Males.	Females.	Total.	
1875-1890	388	322	710	·53
1891	549	439	988	8·65
1892-1917	2,799	2,397	5,196	1·27
1918	218	154	372	1·91
1919	3,851	2,536	6,387	31·98
1920-1922	460	420	880	1·39
1923	268	243	511	2·32
1924-1928	637	562	1,199	1·02
1929	293	248	541	2·16
1930-1934	612	529	1,141	·88
1935	316	262	578	2·18
1936	127	87	214	·80
1937	101	77	178	·66
1938	178	176	354	1·30
1939	166	169	335	1·22
1940	80	51	131	·47
1941	62	88	150	·54
1942	126	117	243	·86
1943	90	73	163	·57
1944	43	36	79	·28
1945	36	33	69	·24

Prior to 1919 influenza was regarded as a disease fatal to young children and persons past 45 years of age, but in the severe world-wide epidemic of that year the disease was most fatal to persons in the prime of life (25 to 44 years). A comparison of the deaths from 1920 to 1934 with those of 1914-18 and 1919 in age groups representing approximately the different stages of life was published in the 1933-34 issue of the Year Book. This indicated that the character of the disease reverted to the type experienced prior to 1919.

*Tuberculous Diseases.*

The number of deaths ascribed to the several classified forms of tuberculous disease during 1945 was 906 or 3·36 per cent. of the actual mortality in the State, and equal to 2·99 per 10,000 living—a rate 13 per cent. below the average for the preceding quinquennium.

A comparison of death rates from tuberculous diseases in the Australian States and New Zealand for the last six years is given on the next page. The rates are stated per 1,000 of the total population, and do not take

account of differences in the distribution of age and sex which have a material influence on the rates.

TABLE 80.—Tuberculous Diseases, States, 1940 to 1945.

State or Country.	Death-rate from tuberculous diseases per 1,000 of Total Population.					
	1940.	1941.	1942.	1943.	1944.	1945.
<i>New South Wales</i> ...	0·35	0·36	0·37	0·34	0·31	0·30
Victoria ...	0·43	0·45	0·45	0·38	0·38	0·36
Queensland ...	0·28	0·30	0·32	0·33	0·28	0·31
South Australia ...	0·37	0·37	0·41	0·35	0·30	0·32
Western Australia ...	0·42	0·44	0·41	0·32	0·31	0·33
Tasmania ...	0·43	0·46	0·54	0·47	0·42	0·47
Commonwealth ...	0·37	0·38	0·39	0·35	0·33	0·33
New Zealand ...	0·39	0·39	0·39	0·37	0·38	0·38

Mortality from tuberculous diseases is usually lower in New South Wales than in any other Australian State except Queensland.

#### *Tuberculosis of the Respiratory System.*

Tuberculosis of the respiratory system, or phthisis, was the cause of 803 deaths, or 88 per cent. of the number due to tuberculosis during the year 1945. The mortality rate was 13 per cent. lower than in the previous quinquennium. The male rate in 1945 was 3·59 per 10,000 of population, and the female rate 1·95.

The following table shows the number of deaths from tuberculosis of the respiratory system and the rates for each sex since 1884:—

TABLE 81.—Tuberculosis of Respiratory System, 1884 to 1945.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	3,132	11·83	2,022	9·30	5,154	10·69
1889-93	3,269	10·61	1,925	7·38	5,194	9·13
1894-98	3,191	9·43	1,983	6·68	5,174	8·15
1899-1903	3,322	9·24	2,304	7·08	5,626	8·21
1904-08	2,985	7·72	2,184	6·13	5,169	6·96
1909-13	3,220	7·31	2,286	5·69	5,506	6·54
1914-18	3,373	6·95	2,194	4·72	5,567	5·86
1919-23	3,484	6·49	2,173	4·21	5,657	5·37
1924-28	3,337	5·57	2,217	3·85	5,554	4·73
1929-33	3,094	4·77	2,013	3·20	5,107	4·00
1934-38	2,996	4·44	1,790	2·71	4,786	3·58
1939-43	3,001	4·28	1,595	2·29	4,596	3·29
1941	630	4·50	304	2·19	934	3·35
1942	629	4·45	329	2·34	958	3·40
1943	572	4·02	318	2·24	890	3·13
1944	548	3·81	277	1·93	825	2·87
1945	521	3·59	282	1·95	803	2·77

The general rate in the last 5 years has decreased by 70 per cent. in comparison with the first quinquennium shown, the rate for females slightly more than for males. The female rate ranged from 49 per cent. of the male rate in the year 1941 to 79 per cent. during the periods 1904-08 and 1884-88.

The improvement in the death rate is due to many factors, such as the regulation of immigration and conditions of employment, etc., the enforcement of the health laws, but principally to improved methods of medical treatment.

Notification of cases of pulmonary tuberculosis by medical practitioners has been compulsory throughout the State since 1st March, 1929.

The table below shows the death rates from tuberculosis of the respiratory system or phthisis according to age and sex during the three years around each census since 1891.

TABLE 82.—Tuberculosis of Respiratory System, Specific Mortality, 1890 to 1934.

Age Group (Years).	Death Rate per 10,000 Living.				
	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Males.					
0-4 ... ..	·63	2·04	·57	·57	·09
5-9 ... ..	·41	·47	·31	·25	·08
10-14 ... ..	·85	·28	·49	·25	·08
15-19 ... ..	3·89	3·22	2·31	2·28	·75
20-24 ... ..	12·52	10·56	5·99	5·12	2·80
25-34 ... ..	17·91	14·37	9·72	9·18	4·66
35-44 ... ..	20·21	18·15	12·55	11·07	6·92
45-54 ... ..	20·07	19·79	15·49	12·97	10·06
55-64 ... ..	19·63	17·74	17·06	14·17	10·99
65-74 ... ..	15·84	19·24	13·37	10·27	9·36
75 and over ... ..	6·97	7·84	7·81	5·21	4·68
All Ages (Crude Rate) ...	10·38	9·48	7·17	6·44	4·43
Rate in 1890-92 = 100...	100	91	69	62	43
Females.					
0-4 ... ..	·93	1·43	·63	·42	·09
5-9 ... ..	·42	·48	·24	·35	·05
10-14 ... ..	·92	1·20	·59	·39	·27
15-19 ... ..	5·29	5·46	3·80	2·40	1·90
20-24 ... ..	10·47	7·99	7·74	5·92	5·21
25-34 ... ..	16·43	13·56	10·00	7·12	5·20
35-44 ... ..	15·84	13·41	9·80	6·46	4·24
45-54 ... ..	12·85	10·96	7·75	5·63	3·72
55-64 ... ..	9·81	11·96	8·34	5·32	3·29
65-74 ... ..	11·17	7·31	10·60	6·14	3·52
75 and over ... ..	4·18	2·59	3·84	3·19	2·55
All Ages (Crude Rate) ...	7·50	6·95	5·64	4·02	2·91
Rate in 1890-92 = 100...	100	93	75	54	39
Persons.					
0-4 ... ..	·78	1·74	·60	·50	·09
5-9 ... ..	·41	·48	·27	·30	·07
10-14 ... ..	·88	·73	·54	·32	·17
15-19 ... ..	4·69	4·34	3·04	2·34	1·32
20-24 ... ..	11·54	9·26	6·84	5·53	3·98
25-34 ... ..	17·28	13·98	9·86	8·15	4·93
35-44 ... ..	18·43	16·09	11·27	8·84	5·57
45-54 ... ..	17·17	16·06	12·10	9·50	6·99
55-64 ... ..	15·84	15·26	13·25	10·13	7·20
65-74 ... ..	13·90	14·36	12·12	8·35	6·51
75 and over ... ..	5·85	5·49	6·03	4·21	3·59
All Ages (Crude Rate) ...	9·06	8·28	6·44	5·25	3·68
Rate in 1890-92 = 100...	100	91	71	58	41

The rate improved to a greater extent amongst males than amongst females between 1890-92 and 1910-12, but in later years there has been a greater reduction amongst females.

A comparison of the death rates from phthisis in the various age groups shows a remarkable difference in respect of men and women. Excluding the age groups below 15 years where mortality is comparatively light, the rates for females are the higher in the groups up to 35 years and above that age there is a large excess of deaths amongst males, the rate amongst men in the group 55-64 years being more than three times the corresponding rate amongst women. In this group the male death rate from phthisis reaches the maximum. Amongst females the rate has generally been highest at ages 25 to 34 years, then decreases up to ages 55 to 64 years, but in the group 65-74 years it rises slightly.

#### *Other Tuberculous Diseases.*

Of the 906 deaths during 1945 from tuberculosis, only 63 were from tuberculosis of organs other than the respiratory system, and of these 20, or .32 per cent., were of children under 5 years of age. Taking the age group under 5 years, and all ages, the following table shows the great improvement in the death rates since the decennium 1891-1900:—

TABLE 83.—Other Tuberculous Diseases, 1891 to 1945.

Period.	Deaths per 10,000 living—Tuberculosis other than Respiratory System.					
	Ages under 5 Years.			All Ages.		
	Males.	Females.	Total.	Males.	Females.	Total.
1891-1900	15.93	13.41	14.69	2.76	2.62	2.69
1901-1910	7.11	5.98	6.55	1.70	1.51	1.61
1911-1920	3.13	2.96	3.06	1.00	.86	.93
1921-1930	1.85	1.67	1.76	.63	.52	.58
1931-1940	1.26	1.02	1.14	.42	.30	.35
1941	.85	.87	.86	.24	.24	.24
1942	1.33	1.03	1.18	.29	.28	.29
1943	1.28	1.16	1.22	.26	.30	.28
1944	1.07	.72	.90	.24	.24	.24
1945	.88	.66	.75	.24	.19	.22

#### *Cancer.*

In 1945 the deaths from cancer numbered 3,430, equal to a rate of 11.83 per 10,000 living. The average mortality in the five years 1939-43, measured by crude death rates, was much higher than in any preceding period, being 11.31 per 10,000 living as compared with 3.30 for the period 1884-88. The total for 1945 included 1,675 males and 1,755 females, the rates being 11.56 and 12.10 per 10,000 living of each sex respectively.

Classified according to the parts of the body affected (according to the grouping of the International List) and arranged in order of fatality, cancer caused the following deaths in 1945:—Stomach and duodenum 708,

other of digestive tract 537, intestines 460, breast 357, female genital organs 339, male genital organs 204, respiratory organs 204, male and female urinary organs 132, buccal cavity 129, skin 104 and other organs 256. Details of the particular sites grouped under these headings are shown in the Statistical Register of New South Wales.

The following table shows the deaths and crude rates of each sex since 1884:—

TABLE 84.—Cancer, 1884 to 1945.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	359	3.25	732	3.37	1,591	3.30
1889-93	1,262	4.10	1,038	3.98	2,300	4.04
1894-98	1,719	5.09	1,387	4.68	3,106	4.89
1899-1903	2,295	6.38	1,877	5.77	4,172	6.09
1904-08	2,671	6.91	2,418	6.78	5,089	6.85
1909-13	3,362	7.63	2,860	7.12	6,222	7.39
1914-18	3,886	8.00	3,458	7.44	7,344	7.73
1919-23	4,738	8.82	4,292	8.31	9,030	8.57
1924-28	5,790	9.66	5,068	8.80	10,858	9.24
1929-33	6,501	10.01	5,704	9.08	12,205	9.55
1934-38	7,242	10.73	6,810	10.32	14,052	10.52
1939-43	8,086	11.52	7,718	11.10	15,804	11.31
1941	1,627	11.61	1,499	10.78	3,126	11.20
1942	1,633	11.55	1,489	10.60	3,122	11.08
1943	1,669	11.72	1,698	11.98	3,367	11.85
1944	1,505	10.47	1,676	11.69	3,181	11.08
1945	1,675	11.56	1,755	12.10	3,430	11.83

Although fatal cancer occurs at all ages, the disease is one of advanced age, and 97 per cent. of the persons who died from cancer in 1945 were 35 years or over. This fact, taken in conjunction with the increasing proportion of persons of advanced age in the population makes it difficult to draw valid conclusions from comparisons of crude rates as shown above.

The following table shows the death rates for cancer in age groups and the standardised rate for "all ages," which represents the death rate which would have resulted if the age and sex constitution of the male and female population had been the same as it was at the census of 1933. Crude rates are shown also in order to emphasise the fact that these greatly exaggerate the increase in death rates from cancer.

TABLE 85.—Cancer, Specific Mortality 1900 to 1943.

Age Group (years).	Death Rate per 10,000 Living—Cancer.				
	1900-02.	1910-12.	1920-22.	1932-34.	1941-43.
Males.					
25-29 ... ..	·70	·64	·91	·85	·63
30-34 ... ..	1·37	1·31	·97	1·14	1·13
35-39 ... ..	2·45	2·53	2·82	2·13	2·19
40-44 ... ..	5·70	6·06	4·55	4·12	3·71
45-49 ... ..	9·84	9·68	8·57	8·90	7·51
50-54 ... ..	16·49	17·99	19·33	14·01	15·36
55-59 ... ..	29·55	30·89	29·59	27·96	25·59
60-64 ... ..	45·74	44·55	48·74	46·22	40·94
65-69 ... ..	65·52	72·04	69·63	69·23	64·82
70-74 ... ..	68·71	79·20	90·07	108·98	37·73
75-79 ... ..	77·89	86·39	115·48	122·48	134·14
80-84 ... ..	76·40	113·03	109·64	139·18	130·27
85 and over ... ..	93·57	116·17	135·95	142·92	161·55
All Ages—Crude ... ..	6·46	7·67	8·74	10·53	11·60
Standardised ... ..	9·16	9·90	10·39	10·53	9·93
Females.					
25-29 ... ..	·59	·86	·76	·66	·75
30-34 ... ..	1·55	2·24	2·17	1·89	1·98
35-39 ... ..	4·28	4·84	4·05	4·34	4·33
40-44 ... ..	9·47	9·42	9·03	8·45	7·29
45-49 ... ..	17·45	15·77	15·97	13·67	11·54
50-54 ... ..	18·76	21·52	21·58	20·57	17·50
55-59 ... ..	28·33	32·26	31·33	29·00	24·66
60-64 ... ..	40·80	39·41	41·55	38·25	36·72
65-69 ... ..	47·82	58·05	61·08	46·89	50·95
70-74 ... ..	74·15	62·11	73·90	67·85	69·78
75-79 ... ..	76·46	95·00	100·49	82·82	90·42
80-84 ... ..	68·97	89·86	100·26	104·18	104·22
85 and over ... ..	97·56	97·35	128·55	120·91	124·54
All Ages—Crude ... ..	5·57	7·12	8·36	9·48	11·10
Standardised ... ..	9·52	10·12	10·58	9·48	9·17
Persons.					
25-29 ... ..	·64	·75	·83	·76	·69
30-34 ... ..	1·46	1·76	1·56	1·51	1·55
35-39 ... ..	3·26	3·64	3·42	3·27	3·24
40-44 ... ..	7·30	7·60	6·71	6·26	5·51
45-49 ... ..	13·01	12·39	12·13	11·21	9·59
50-54 ... ..	17·46	19·51	20·37	17·64	16·43
55-59 ... ..	29·02	31·48	30·38	28·47	25·13
60-64 ... ..	43·67	42·25	45·45	42·28	38·82
65-69 ... ..	58·19	65·65	65·74	58·35	57·67
70-74 ... ..	70·88	71·42	82·36	89·06	83·14
75-79 ... ..	77·26	90·17	108·12	102·72	111·38
80-84 ... ..	73·03	102·68	104·98	121·04	116·20
85 and over ... ..	95·39	106·48	132·20	130·60	139·99
All Ages—Crude ... ..	6·04	7·41	8·55	10·01	11·35
Standardised* ... ..	9·34	10·01	10·48	10·01	9·56

\* Standardised for sex as well as age distribution.

The death rate from cancer is higher amongst females than males up to 55 years, but the male rate is the higher in later ages. It is for this reason that the crude rate is higher for males than for females. The standardised rate, however, shows that the female mortality from cancer was the higher in the first thirty years covered by the table, but the standardised male rate was higher in the period 1932-34 and has apparently remained so.

This change may be due to the operation of two factors, viz., (1) the success of operations upon the relatively more accessible cancers of females; and (2) the better diagnosis of the less accessible cancer of females as a consequence of improved medical appliances and knowledge.



The crude rate for males increased by 80 per cent. between 1900-02 and 1941-43 and the crude rate for females increased by 99 per cent. during this period. When correction is made for change in the age structure of the population as outlined above, the standardised rate for males shows an increase of only 8 per cent., and the standardised rate for females a decline of 4 per cent.

In all countries for which records are kept the crude death rate from cancer has been increasing and great attention is being given to the problem of the control of cancer.

Co-ordination of action throughout Australia is made possible by the Australian Cancer Conference, convened annually (except during the war) by the Commonwealth Department of Health. Through this department, also, cancer workers in Australia are kept in touch with investigations in other countries. Treatment and research are concerned principally with surgery, X-ray and radium. The Commonwealth X-Ray and Radium Laboratory in Victoria cares for the radium purchased by the Commonwealth Government and conducts research regarding the use of X-rays and radium. Radium and radon are issued to approved hospitals and private practitioners throughout Australia.

In the following table the rates of mortality from cancer are given for the Australian States and New Zealand. The comparison is upon the crude basis of total population and is uncorrected for age and sex incidence.

TABLE 86.—Cancer, States, 1940 to 1945.

State or Country.	Cancer Death rate per 1,000 of Total Population.					
	1940.	1941.	1942.	1943.	1944.	1945.
<i>New South Wales</i> ... ..	1.11	1.12	1.11	1.19	1.11	1.18
<i>Victoria</i> ... ..	1.33	1.38	1.35	1.38	1.33	1.37
<i>Queensland</i> ... ..	1.03	0.99	1.00	1.07	1.03	1.04
<i>South Australia</i> ... ..	1.26	1.26	1.25	1.31	1.27	1.23
<i>Western Australia</i> ... ..	1.14	1.25	1.30	1.15	1.17	1.15
<i>Tasmania</i> ... ..	1.09	1.27	1.18	1.17	1.10	1.13
<i>Commonwealth</i> ... ..	1.17	1.19	1.18	1.23	1.17	1.21
<i>New Zealand</i> ... ..	1.20	1.32	1.31	1.17	1.40	1.39

#### *Diabetes.*

Although diabetes is responsible for only 2 per cent. of the annual number of deaths the rate of mortality from this cause has increased, the average of the last five years being 122 per cent. higher than that for the period 1906-10.

The deaths due to diabetes in 1945 numbered 524 equal to a rate of 1.81 per 10,000 living. The rate for males was 1.15 and for females 2.47 per 10,000 living of each sex. Most of the deaths occurred after middle life, 487 out of 524 deaths in 1945, or 93 per cent. being persons over 45 years of age.

#### *Meningitis.*

The diseases included under the above heading—encephalitis (non-epidemic), simple meningitis, and non-epidemic cerebro-spinal meningitis—caused 94 deaths during 1945, the corresponding rate being 0.32 per 10,000 living. Of this number 50 were males and 44 females, and the rates per

10,000 living of each sex were 0.35 and 0.30 respectively. The deaths in the metropolis and country were 43 and 51, respectively. Of those who died during 1945, 45 or 48 per cent., were under 5 years of age.

### *Cerebral Hæmorrhage and Other Intracranial Lesions.*

Owing to changes in certification and classification of deaths from cerebral hæmorrhage during recent years comparable statistics are not available concerning mortality from this disease.

Under the revised classification introduced in 1940, all intracranial lesions of vascular origin are grouped together and deaths are assigned to this group whether the lesion was stated to be due to arteriosclerosis or arterial hypertension, or not.

The following table shows the number of deaths and the rates as recorded for these types of lesion since 1940.

TABLE 87.—Intracranial Lesions of Vascular Origin, 1940 to 1945.

Year.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1940 ... ..	1,093	7.84	1,210	8.78	2,303	8.31
1941 ... ..	1,074	7.67	1,297	9.33	2,371	8.49
1942 ... ..	1,236	8.74	1,439	10.25	2,675	9.49
1943 ... ..	1,196	8.40	1,495	10.55	2,691	9.47
1944 ... ..	1,198	8.33	1,532	10.69	2,730	9.51
1945 ... ..	1,316	9.08	1,558	10.75	2,874	9.91

### *Convulsions of Children.*

Mortality ascribed to this cause shows a remarkable decline, having fallen from 721 deaths per annum in the five years 1880-84 to an average of 17 in 1941-45.

Deaths, however, are not included in this category if the cause of the convulsions is recorded and the figures reflect increasing skill in diagnosing the diseases of children.

Only deaths of children under 5 years of age are listed under this heading and the deaths in 1945 represent 0.63 per 10,000 children in this age group as compared with 0.69 in the previous quinquennium. Of the deaths in 1945, 11 occurred during the first year of life, the equivalent rate being 0.18 per 1,000 births.

### *Diseases of the Heart.*

Statistics of mortality from diseases of the heart are of limited value, because there are important factors connected with the mode of certification and classification which affect the numbers from year to year.

Causes classified as diseases of the heart include pericarditis, endocarditis and other valvular diseases, diseases of the myocardium, angina pectoris, and, in 1931 and subsequent years, diseases of the coronary arteries.

The extraordinary increase in mortality from diseases of the heart as shown in the following table is largely a result of more highly specialised biological knowledge and greater attention to pathological diagnoses and to changes in the classification of causes of death, *e.g.*, the inclusion of deaths from diseases of the coronary arteries from 1931. Moreover, as deaths attributed to more than one cause are classified to one disease only, the measure of preference given to diseases of the heart may have operated in the direction of swelling the increase in the number of deaths ascribed to this group of diseases. It is not practicable, however, to gauge the effects of the various changes which occur over a period of years.

A further factor contributing to the apparent increase is the changing age composition of the population. A larger proportion of the people is reaching the ages at which the death rate from diseases of the heart is highest. An analysis of the deaths according to age is shown in Table 89. Comparisons of the rates for any particular age-group from period to period are subject to the factors mentioned above.

The number of deaths ascribed to diseases of the heart since 1884, and the death rates of each sex, are shown below:—

TABLE 88.—Diseases of the Heart, 1884 to 1945.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	2,149	8.12	1,390	6.39	3,539	7.34
1889-93	2,250	7.30	1,357	5.20	3,607	6.34
1894-98	2,434	7.19	1,478	4.98	3,912	6.16
1899-1903	2,917	8.11	1,932	5.94	4,849	7.08
1904-1908	3,791	9.81	2,727	7.65	6,518	8.77
1909-1913	5,054	11.47	3,633	9.04	8,687	10.31
1914-1918	5,950	12.26	4,168	8.97	10,118	10.65
1919-1923	6,901	12.85	5,384	10.42	12,285	11.66
1924-1928	9,360	15.61	7,377	12.81	16,737	14.24
1929-1933	12,070	18.59	9,245	14.72	21,315	16.69
1934-1938	17,794	26.36	12,612	19.10	30,406	22.77
1939-1943	23,802	33.92	16,704	24.02	40,506	28.99
1941	4,616	32.94	3,454	24.85	8,070	28.91
1942	5,351	37.85	3,623	25.79	8,974	31.84
1943	5,241	36.81	3,697	26.09	8,938	31.46
1944	4,838	33.66	3,557	24.81	8,395	29.24
1945	5,074	35.01	3,598	24.82	8,672	29.91

Of the persons who died from diseases of the heart during 1945, 96 per cent. were 45 years or over.

In the following table are shown the death rates for each sex in age groups during the three years around each census since 1891:—

TABLE 89.—Diseases of the Heart, Specific Mortality, 1890 to 1934.

Age Group (Years).	Death Rate per 10,000 Living—Diseases of the Heart.				
	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
<b>Males.</b>					
0-4 ... ..	·75	1·96	·92	·49	·17
5-9 ... ..	·91	1·05	1·22	·90	·60
10-14 ... ..	1·59	1·61	1·56	1·43	·74
15-19 ... ..	2·07	1·82	2·23	1·49	1·21
20-24 ... ..	2·11	1·73	1·90	1·71	1·17
25-34 ... ..	3·21	2·14	2·84	2·80	1·70
35-44 ... ..	7·44	5·70	5·97	5·30	5·62
45-54 ... ..	15·96	13·45	15·03	13·48	19·19
55-64 ... ..	40·05	31·61	39·92	38·61	58·52
65-74 ... ..	77·02	77·12	105·21	107·23	160·11
75 and over ... ..	101·80	123·89	228·18	293·63	433·83
All Ages (Crude Rate) ...	7·78	8·10	11·73	12·78	21·82
Rate in 1890-92 = 100...	100	104	151	164	280
<b>Females.</b>					
0-4 ... ..	·65	1·55	·70	·51	·30
5-9 ... ..	1·16	·77	·75	1·33	·56
10-14 ... ..	·76	1·61	2·06	1·47	·81
15-19 ... ..	1·52	1·63	2·10	1·60	1·21
20-24 ... ..	2·05	1·63	2·25	1·45	1·33
25-34 ... ..	3·48	2·57	2·75	2·21	1·98
35-44 ... ..	7·29	5·63	5·77	5·17	4·55
45-54 ... ..	11·46	10·88	13·67	10·24	11·90
55-64 ... ..	26·57	25·48	31·53	29·86	33·93
65-74 ... ..	62·78	61·41	94·64	88·82	118·67
75 and over ... ..	91·86	104·09	190·99	248·91	367·98
All Ages (Crude Rate) ...	5·29	5·92	9·33	10·10	16·56
Rate in 1890-92 = 100...	100	112	176	191	313
<b>Persons.</b>					
0-4 ... ..	·70	1·76	·81	·50	·23
5-9 ... ..	1·03	·91	·99	1·11	·58
10-14 ... ..	1·18	1·61	1·81	1·45	·77
15-19 ... ..	1·79	1·73	2·17	1·55	1·21
20-24 ... ..	2·08	1·68	2·07	1·58	1·25
25-34 ... ..	3·33	2·35	2·80	2·51	1·84
35-44 ... ..	7·38	5·67	5·88	5·24	5·08
45-54 ... ..	14·16	12·37	14·43	11·95	15·66
55-64 ... ..	34·84	28·97	36·25	34·62	46·41
65-74 ... ..	71·11	70·70	100·43	98·68	139·92
75 and over ... ..	97·82	115·04	211·48	271·51	400·22
All Ages (Crude Rate) ...	6·64	7·07	10·59	11·47	19·23
Rate in 1890-92 = 100...	100	106	159	173	290

Although the crude rate for all ages has increased nearly threefold during the period reviewed, the increase is confined to ages 45 and over, due to causes explained on page 101. The rates in all groups below 45 years have declined since 1890.

Under the age of 35 there is very little difference between the rates of males and females, thereafter the male rate is much higher, the result, no doubt, of the more strenuous life of males.

### *Bronchitis.*

Bronchitis caused 219 deaths during 1945, equal to a rate of 0.76 per 10,000 living. Of the total, 139 were males and 80 females, the corresponding rates per 10,000 of each sex being 0.96 and 0.55. The rate for the State was 17 per cent. lower than during the previous five years.

Deaths in the metropolis numbered 101 and there were 118 in other parts of the State. Of the total deaths, 47 were caused by acute bronchitis, 160 cases were recorded as being due to the disease in its chronic form, and 12 were unspecified. Of those persons who died of acute bronchitis, 6 per cent. were under 1 year of age, and 79 per cent. were 55 years or over, whilst 85 per cent. of those who succumbed to chronic bronchitis were 55 years of age and over.

Experience shows the disease to be most prevalent during the months of June, July, August and September.

### *Pneumonia.*

Pneumonia, including broncho-pneumonia, was the cause of 1,128 deaths during 1945, the equivalent rate per 10,000 of population being 3.89, which was 23 per cent. below the average for the preceding quinquennium. Of the total, 616 were males and 512 females. The rates for males and females per 10,000 living were 4.25 and 3.53 respectively. The deaths in the metropolis numbered 605, and those in the remainder of the State 523.

An analysis of the deaths according to age shows that the majority of cases are children under 5 years of age and adults over 55 years; these represented 22 per cent. and 62 per cent. respectively of the total number in 1945. The rate of mortality from pneumonia is lowest among children between 10 and 14 years of age, then it increases with advancing age.

The following table gives deaths and rates, according to sex, since the year 1884:—

TABLE 90.—Pneumonia, 1884 to 1945.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	2,032	7.68	1,301	5.98	3,333	6.91
1889-93	2,158	7.00	1,373	5.26	3,531	6.21
1894-98	2,514	7.43	1,528	5.15	4,042	6.37
1899-1903	3,191	8.87	2,000	6.15	5,191	7.58
1904-1908	2,816	7.28	1,824	5.12	4,640	6.24
1909-1913	2,983	6.77	1,931	4.81	4,914	5.83
1914-1918	3,779	7.78	2,402	5.17	6,181	6.50
1919-1923	4,217	7.85	3,042	5.89	7,259	6.89
1924-1928	4,810	8.02	3,498	6.08	8,308	7.07
1929-1933	4,318	6.65	3,205	5.10	7,523	5.89
1934-1938	5,028	7.45	3,574	5.41	8,602	6.44
1939-1943	4,270	6.08	3,229	4.64	7,499	5.37
1941	740	5.28	634	4.56	1,374	4.92
1942	905	6.40	700	4.98	1,605	5.69
1943	906	6.36	630	4.45	1,536	5.41
1944	693	4.82	525	3.66	1,218	4.24
1945	616	4.25	512	3.53	1,128	3.89

The greatest mortality from pneumonia occurs in the cold weather and early spring.

The following table shows the death rates for each sex in age groups, during the three years around each census since 1891:—

TABLE 91.—Pneumonia, Specific Mortality, 1890 to 1934.

Age Group (years).	Death Rate per 10,000 Living—Pneumonia.				
	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
<b>Males.</b>					
0-4 ... ..	18.14	24.18	19.69	21.12	15.42
5-9 ... ..	1.22	1.64	1.41	1.60	1.12
10-14 ... ..	.69	.80	.78	.83	.53
15-19 ... ..	2.55	3.49	1.25	1.79	1.02
20-24 ... ..	3.02	5.25	2.46	2.30	1.20
25-34 ... ..	3.77	6.09	3.03	2.94	1.42
35-44 ... ..	7.49	8.27	4.99	5.07	2.96
45-54 ... ..	10.86	13.01	8.16	8.52	5.65
55-64 ... ..	16.71	22.60	11.94	13.07	11.31
65-74 ... ..	26.76	36.90	24.99	28.61	23.68
75 and over ... ..	26.50	57.50	43.45	58.36	72.41
All Ages (Crude Rate) ...	7.22	9.78	6.85	7.55	6.03
Rate in 1890-92 = 100...	100	135	95	105	84
<b>Females.</b>					
0-4 ... ..	15.64	20.66	17.88	17.60	12.50
5-9 ... ..	1.07	1.09	1.14	1.35	.99
10-14 ... ..	.70	1.61	.92	.88	.86
15-19 ... ..	1.88	2.15	.61	1.30	.96
20-24 ... ..	2.23	2.80	1.03	1.30	1.12
25-34 ... ..	3.48	3.66	1.46	2.34	1.42
35-44 ... ..	4.88	5.89	2.68	2.87	2.37
45-54 ... ..	7.61	5.63	3.10	3.93	3.72
55-64 ... ..	9.81	15.07	8.08	7.66	6.15
65-74 ... ..	21.18	25.34	14.69	21.27	18.41
75 and over ... ..	19.83	48.49	44.10	65.22	55.69
All Ages (Crude Rate) ...	5.46	6.62	4.74	5.52	4.63
Rate in 1890-92 = 100...	100	121	87	101	85
<b>Persons.</b>					
0-4 ... ..	16.91	22.45	18.80	19.39	13.99
5-9 ... ..	1.15	1.37	1.28	1.48	1.06
10-14 ... ..	.70	1.20	.85	.86	.69
15-19 ... ..	2.22	2.82	.93	1.55	.99
20-24 ... ..	2.64	4.01	1.76	1.79	1.16
25-34 ... ..	3.65	4.91	2.27	2.64	1.42
35-44 ... ..	6.42	7.23	3.91	4.01	2.66
45-54 ... ..	9.56	9.89	5.94	6.35	4.71
55-64 ... ..	14.05	19.37	10.25	10.60	8.77
65-74 ... ..	24.45	32.18	20.33	25.21	21.11
75 and over ... ..	23.83	53.47	43.74	61.76	63.88
All Ages (Crude Rate) ...	6.41	8.28	5.84	6.56	5.34
Rate in 1890-92 = 100...	100	129	91	102	83

The male death rate is higher than the female rate at all ages excepting 10-14 years. The rates have fluctuated, but show a general decline

of about 17 per cent. during the period under review, and the fall is apparent at all ages, except 75 and over. This increase is due probably to more information being available as to cause of death.

*Diseases of the Digestive System.*

Diseases of the digestive system caused the deaths of 623 males and 513 females during 1945, the respective rates per 10,000 living being 4.30 and 3.54. The rate corresponding to the total deaths from these diseases in the State was 3.92 per 10,000 living, and was 17 per cent. below that experienced during the previous five years. Deaths resulting from diseases of the digestive system are caused mainly by diarrhœa and enteritis, appendicitis, hernia and intestinal obstruction, ulcer of the stomach or duodenum, diseases of the gall bladder and ducts, and cirrhosis of the liver. Some of these causes are discussed later.

*Diarrhœa and Enteritis.*

The incidence of these diseases is mainly upon young children, the deaths under 1 year of age from these causes in 1945 being 71—39 males and 32 females. In 1945 there were 216 deaths from these causes at all ages, equivalent to a rate of 0.75 per 10,000 of the general population, the rate for males being 0.68 and for females 0.81. The combined rate was 25 per cent. below the average for the preceding quinquennium. The following table shows the number of deaths and the rates since 1899, distinguishing between the sexes:—

TABLE 92.—Diarrhœa and Enteritis, 1899 to 1945.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1899-1903	4,422	12.29	3,901	11.99	8,323	12.15
1904-1908	3,714	9.61	3,000	8.41	6,714	9.03
1909-1913	4,257	9.66	3,471	8.64	7,728	9.18
1914-1918	3,622	7.46	2,957	6.36	6,579	6.92
1919-1923	3,813	7.10	3,039	5.88	6,852	6.50
1924-1928	2,436	4.06	2,036	3.54	4,472	3.81
1929-1933	1,353	2.08	998	1.59	2,351	1.84
1934-1938	634	.94	558	.85	1,192	.89
1939-1943	813	1.16	719	1.03	1,532	1.10
1941	184	1.31	132	.95	316	1.13
1942	155	1.10	149	1.06	304	1.08
1943	134	.94	135	.95	269	.95
1944	111	.77	84	.59	195	.68
1945	98	.68	118	.81	216	.75

The low mortality in recent years is probably due in a large measure to the work of the baby health centres previously mentioned. Seasonal conditions may have helped also, but the effects of this factor are difficult to determine for the State as a whole.

A comparison of rates calculated on the population at all ages is not satisfactory because those who die from this cause are mainly children in the early years of life and the proportion of the population under 5 years of age has declined considerably since 1871. This has been an important factor in the decline in the rates shown in Table 92. In 1945, 52 per cent. of those who died were under 2 years and 61 per cent. were under 5 years of age.

The following table shows the deaths from this cause, of children under 2 years of age and under 5 years of age. The rates are based upon the population living in these age groups.

TABLE 93.—Diarrhœa and Enteritis, Specific Mortality, 1881 to 1945.

Year.	Under 2 years of Age.		Year.	Under 5 years of Age.	
	Deaths.	Rate per 10,000 Living.		Deaths.	Rate per 10,000 Living.
1881	733	335.0	1935	143	6.5
1891	985	147.6	1936	172	8.0
1901	1,165	181.0	1937	165	7.6
1911	963	112.1	1938	174	8.0
1921	988	100.8	1939	226	10.2
1931	283	29.4	1940	218	9.6
1941	208	21.9	1941	232	10.0
1942	170	17.2	1942	189	8.0
1943	143	14.0	1943	168	6.9
1944	91	8.3	1944	116	4.5
1945	112	9.7	1945	132	4.9

In the five years 1941-45, 41 per cent. of the deaths from diarrhœa and enteritis occurred in the summer, 26 per cent. in the autumn, 18 per cent. in the spring and 15 per cent. in winter.

#### *Appendicitis.*

To this cause 120 deaths were ascribed in 1945, the rate being 0.41 per 10,000 living, which is 35 per cent. lower than the average of the preceding quinquennium. Appendicitis is more fatal to males than to females, the rate for the former in 1945, being 0.53 and for the latter 0.30 per 10,000 living.

#### *Cirrhosis of the Liver.*

Information relating to mortality from cirrhosis of the liver is of interest in connection with alcoholism.

Deaths from cirrhosis of the liver in 1945 numbered 74—46 males and 28 females, the rate being 0.26 per 10,000 living—30 per cent. below the average for the previous quinquennial period. This disease is more prevalent among males than females—the rate for the former in 1945 being 0.32 and for the latter 0.19 per 10,000 living of each sex.



*Nephritis.*

Nephritis, or Bright's disease, has grown from a comparatively infrequent cause to a prominent position among the major causes of death the incidence of which falls upon the general population.

During 1945 there were 1,446 deaths due to diseases of the genito-urinary system, of which 1,117 were caused by all forms of nephritis. The rate for nephritis was 3.85 per 10,000 living, and for males and females 4.35 and 3.35, respectively, the general rate being approximately 19 per cent. below that experienced during the previous quinquennium. The deaths due to these diseases in the metropolis were 568, and in the rest of the State 549. Experience shows that the fatality of these diseases increases slightly during the winter months.

The number of the deaths and the rates of mortality due to nephritis are shown below:—

TABLE 94.—Nephritis, 1884 to 1943.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	626	2.37	386	1.78	1,012	2.10
1889-93	907	2.94	570	2.18	1,477	2.60
1894-98	1,291	3.81	821	2.77	2,112	3.33
1899-1903	1,659	4.61	996	3.06	2,655	3.88
1904-1908	2,056	5.32	1,199	3.36	3,255	4.38
1909-1913	2,649	6.01	1,539	3.83	4,188	4.97
1914-1918	3,080	6.34	1,682	3.62	4,762	5.01
1919-1923	2,914	5.43	1,886	3.65	4,800	4.56
1924-1928	3,391	5.66	2,324	4.04	5,715	4.86
1929-1933	3,841	5.92	2,902	4.62	6,743	5.28
1934-1938	4,315	6.39	3,375	5.11	7,690	5.76
1939-1943	3,842	5.47	3,094	4.45	6,936	4.96
1941	758	5.41	574	4.13	1,332	4.77
1942	772	5.46	620	4.41	1,392	4.94
1943	750	5.27	666	4.70	1,416	4.98
1944	652	4.54	518	3.61	1,170	4.08
1945	621	4.35	486	3.35	1,117	3.85

During the period covered by the foregoing table the rates of mortality (unadjusted for changing age constitution) both for males and females have about doubled. The rate for males in the last five years was 25

per cent. higher than that for females. Comparatively few persons under 35 years of age die from nephritis, the proportion in 1945 being 6 per cent. of the total.

A more reliable indication of the trend of the death rate from nephritis is provided by the following table which shows the death rates for each sex in age groups during the three years around each census since 1891:—

TABLE 95.—Nephritis, Specific Mortality, 1890 to 1934.

Age-Group (years).	Death Rate per 10,000 Living.—Nephritis.				
	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Males.					
0-4 ... ..	1.30	2.00	.99	.71	.57
5-9 ... ..	.59	.23	.42	.31	.29
10-14 ... ..	.11	.28	.37	.51	.18
15-19 ... ..	.67	.75	.78	.63	.38
20-24 ... ..	.74	.89	1.34	1.11	1.00
25-34 ... ..	1.44	2.11	1.78	1.36	1.19
35-44 ... ..	4.22	4.49	4.13	3.00	2.96
45-54 ... ..	5.88	9.45	10.76	8.96	7.54
55-64 ... ..	11.67	19.09	24.16	20.16	15.32
65-74 ... ..	22.12	35.96	47.60	39.55	38.30
75 and over ... ..	17.43	40.77	71.58	73.99	104.24
All Ages (Crude Rate) ...	2.77	4.57	5.98	5.42	6.14
Rate in 1890-92 = 100...	100	165	216	196	222
Females.					
0-4 ... ..	1.34	1.13	.93	.51	.47
5-9 ... ..	.60	.28	.35	.35	.30
10-14 ... ..	.22	.33	.42	.59	.32
15-19 ... ..	.67	.61	.61	.57	.58
20-24 ... ..	1.30	1.22	1.54	1.12	.97
25-34 ... ..	1.90	1.90	1.46	1.66	1.37
35-44 ... ..	4.01	4.44	3.72	3.06	3.36
45-54 ... ..	5.53	7.84	8.29	6.38	5.92
55-64 ... ..	7.85	11.60	15.55	11.15	11.02
65-74 ... ..	16.18	22.83	31.35	25.99	29.29
75 and over ... ..	9.39	30.39	41.04	49.25	70.06
All Ages (Crude Rate) ...	2.17	3.01	3.87	3.63	4.85
Rate in 1890-92 = 100...	100	139	178	167	224
Persons.					
0-4 ... ..	1.32	1.57	.96	.61	.52
5-9 ... ..	.60	.26	.39	.33	.29
10-14 ... ..	.16	.31	.39	.55	.25
15-19 ... ..	.67	.68	.70	.60	.48
20-24 ... ..	1.01	1.06	1.44	1.11	.99
25-34 ... ..	1.64	2.01	1.62	1.51	1.28
35-44 ... ..	4.14	4.47	3.94	3.03	3.16
45-54 ... ..	5.71	8.77	9.68	7.74	6.76
55-64 ... ..	10.19	15.87	20.39	16.05	13.20
65-74 ... ..	19.66	30.59	40.25	33.25	33.91
75 and over ... ..	14.21	36.13	57.86	61.76	86.80
All Ages (Crude Rate) ...	2.50	3.83	4.97	4.54	5.50
Rate in 1890-92 = 100...	100	153	199	182	220

Although the total rates show a decided increase during the period reviewed, it is only in the oldest group, 75 years and over, that the rate in 1932-34 was higher than twenty years earlier. The death rates for each sex increase rapidly after age 34 years. From age 45 years the rates for males show a marked excess over the rates for females.

#### *Deaths from Puerperal Causes.*

The word "puerperal" is here used in the broadest sense, and the causes of death classified in this group are arranged in the following general order:—Abortion (gestation less than 28 weeks), ectopic gestation, conditions of pregnancy (death before delivery), conditions of childbirth and the puerperium (death during or after delivery, gestation 28 weeks or more). The principle of classification which distinguishes deaths of mothers before delivery from deaths during or after delivery was introduced in 1940.

Details of the causes arranged in this order are not shown in the Year Book but are published annually in the Statistical Register with particulars of age, duration of marriage, previous issue, locality and conjugal condition. In the table in this chapter, the causes of maternal deaths are grouped, for purposes of comparison, according to the basis used prior to 1940.

In 1945 the deaths of 139 women—7 single and 132 married—were due to puerperal causes. The ages of the single women ranged from 16 years to 31 years, 2 being under 21. The ages of the married women ranged from 17 years to 48 years, 7 being under 21 years. The age at marriage of these mothers ranged from 16 to 40 years. In 5 cases the duration of marriage was 20 years or over, but 22 mothers died within a year of marriage. In 47 cases there was no previous issue and in 30 of these cases the death occurred within two years of marriage; in one case, 10 children survived the mother.

The incidence of deaths from puerperal causes falling only upon women bearing children, the rates of mortality are not quoted as a proportion of general population, but have been related to the live births as being the nearest approximation to the number of pregnancies. Whilst not precise the method gives useful results where live births only are recorded. Commencing with 1936, however, it is possible to calculate the rates for New South Wales in two further ways giving a greater measure of precision. The deaths may be related to the live births and stillbirths combined or to the number of confinements calculated from such figure by allowing for plural births. These rates, shown on a later page, are still not an absolute measure, because the deaths include women dying from conditions associated with abortion or miscarriage or dying in an undelivered state, whereas non-fatal abortions, etc., are not recorded and the number cannot be estimated. This shortcoming, however, is general in the statistical records of all countries.

In order to preserve uniformity with former years and with other States and countries which adopt the same method, rates are stated below as per one thousand live births. The general trend of such rates was downwards until 1922. In the next fourteen years the rate was on a higher level, but

an improvement occurred in 1937 and has continued. The following table provides a summary for the period under review:—

TABLE 96.—Maternal Deaths, 1896 to 1945.

Period.	Number of Deaths.				Rate per 1,000 Live Births.					
	Including Criminal Abortion.		Excluding Criminal Abortion.		Including Criminal Abortion.			Excluding Criminal Abortion.		
	Married.	Single.	Married.	Single.	Married.	Single.	Total.	Married.	Single.	Total.
On basis of classification in use to end of 1939.										
1896-1900 ...	1,238	138	...	...	7.24	10.93	7.50	...	...	...
1901-1905 ...	1,190	147	...	...	6.74	11.07	7.04	...	...	...
1906-1910 ...	1,225	132	1,192	110	6.11	9.06	6.81	5.95	7.55	6.06
1911-1915 ...	1,341	140	1,312	114	5.49	9.90	5.73	5.37	8.06	5.52
1916-1920 ...	1,355	130	1,295	93	5.53	10.11	5.76	5.29	7.23	5.39
1921-1925 ...	1,340	119	1,214	75	5.18	8.88	5.36	4.69	5.59	4.73
1926-1930 ...	1,405	132	1,272	70	5.55	9.84	5.77	5.02	5.22	5.03
1931-1935 ...	1,197	158	1,040	85	5.00	14.08	6.03	4.87	7.57	5.00
1936-1940 ...	1,040	125	892	60	4.55	12.44	4.89	3.91	5.97	3.99
1941-1945 ...	858	81	752	43	3.16	6.97	3.32	2.77	3.70	2.81
1943 (a) ...	173	21	156	11	3.15	9.29	3.39	2.84	4.87	2.92
1944 ...	163	19	141	10	2.86	7.44	3.05	2.47	3.92	2.53
1945 ...	128	7	113	5	2.17	2.57	2.19	1.92	1.83	1.91
On basis of classification introduced in 1940 (a).										
1941-45 ...	858	81	752	43	3.20	7.19	3.36	2.80	3.79	2.83
1940 ...	192	17	166	9	4.04	9.06	4.23	3.49	4.79	3.54
1941 ...	192	17	172	5	3.86	8.35	4.04	3.46	2.46	3.42
1942 ...	192	17	160	12	3.79	8.31	3.97	3.16	5.87	3.27
1943 ...	175	21	158	11	3.18	9.29	3.42	2.87	4.87	2.95
1944 ...	167	19	145	10	2.93	7.44	3.12	2.54	3.92	2.60
1945 ...	132	7	117	5	2.24	2.57	2.25	1.99	1.83	1.98

(a) Difference due to inclusion of deaths from acute yellow atrophy of liver.

Details as to conjugal condition, etc., have been recorded annually since 1893. Throughout the ensuing period the maternal death rate was always higher among single than among married women—particularly if criminal abortion is taken into account. During the last ten years half the deaths of single women in this group were due to criminal abortion, as compared with 13 per cent. of the deaths of married women.

A comparison of deaths in childbirth in New South Wales with those of other countries must be made with caution. Apart from possible differences in the method of calculating the rate (as indicated above) and in the definition of "live birth" a further difference arises in the classification of criminal abortion (illegal operations). In the International List of Causes of Death in use up to the end of 1939 these are classified with homicide, but in the revised List which came into use in 1940, criminal abortion is grouped with other deaths due to pregnancy, childbirth or the puerperium. In the table below, deaths from this cause are included to show the total deaths incidental to childbirth, and totals excluding criminal abortion are shown to enable comparison to be made on this basis.

Two further departures from past procedure are (1) the addition of deaths from acute yellow atrophy of the liver associated with pregnancy or childbirth, not formerly included in maternal deaths; and (2) a change in the classification of maternal deaths so that puerperal thrombophlebitis,

embolism and sudden death are now grouped as "infection" (septicaemia). To preserve continuity, the results for 1941 to 1945 are classified in the following table according to the old arrangement.

TABLE 97.—Maternal Deaths, 1941 to 1945.

Cause of Death.	Deaths, 1943.		Deaths, 1944.		Deaths, 1945.		Deaths, 1941-45.	
	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.
Accidents of Pregnancy ...	17	·30	15	·25	21	·34	101	·36
Puerperal Hæmorrhage ...	30	·52	23	·39	17	·27	117	·41
Puerperal Septicæmia ...	24	·42	13	·22	7	·11	84	·30
Post Abortive Septicæmia ...	21	·37	13	·22	6	·10	65	·23
Thrombophlebitis, Embolism, Sudden Death (a) ...	19	·33	23	·39	13	·21	92	·33
Albuminuria and Eclampsia ...	32	·56	54	·90	39	·63	222	·78
Other Casualties of Childbirth	24	·42	14	·23	19	·31	114	·40
Total, excluding Criminal Abortion (b) ...	167	2·92	155	2·60	122	1·97	795	2·81
Criminal Abortion ...	27	·47	31	·52	17	·28	144	·51
Total, including Criminal Abortion (b) ...	194	3·39	186	3·12	139	2·25	939	3·32

(a) See paragraph above the table.

(b) Exclusive of deaths from acute yellow atrophy of liver.

More than any other cause of death during childbirth, puerperal septicaemia (including post-abortive sepsis) can be classed as a preventable disease. In the last five years 16 per cent. of the total deaths (excluding criminal abortion) were due to this cause, compared with over 30 per cent. in 1931-35.

The annual rates of mortality of mothers in childbirth per 1,000 live births in the Metropolis and the remainder of the State since 1927 were as follows:—

TABLE 98.—Maternal Deaths, Metropolis and Country, 1927 to 1945.

Period.	Deaths from Puerperal Septicæmia per 1,000 Live Births.			Total Deaths of Mothers in Childbirth per 1,000 Live Births.					
				Including Criminal Abortion.			Excluding Criminal Abortion.		
	Metropolis.	Remainder of State.	State.	Metropolis.	Remainder of State.	State.	Metropolis.	Remainder of State.	State.
On basis of classification in use to end of 1939.									
1927-30	2·00	1·51	1·71	6·56	5·47	5·90	5·39	5·04	5·18
1931-35	1·81	1·34	1·52	7·03	5·39	6·03	5·07	4·96	5·00
1936-40	1·23	1·19	1·20	5·44	4·53	4·89	4·01	3·98	3·99
1941-45	·80	·90	·85	3·14	3·47	3·32	2·41	3·15	2·81
On basis of classification introduced in 1940.									
1941	·94	1·09	1·02	3·93	4·12	4·04	3·00	3·75	3·42
1942	1·03	·85	·93	3·70	4·18	3·97	2·63	3·77	3·27
1943	·93	1·29	1·12	3·08	3·73	3·42	2·45	3·40	2·95
1944	·81	·83	·82	3·25	3·00	3·12	2·61	2·59	2·60
1945	·37	·47	·42	2·03	2·46	2·25	1·56	2·36	1·98

Rates of maternal deaths for the years 1944 and 1945 calculated by the two additional methods mentioned earlier are shown in the following table. The rates on one basis are not comparable with those on any other.

TABLE 99.—Maternal Deaths, Special Rates, 1944 and 1945.

Cause of Death.	Deaths per 1,000 All Births (Live and Still).			Deaths per 1,000 Confinements.		
	Married.	Single.	Total.	Married.	Single.	Total.
1944.						
Accidents of Pregnancy ... ..	·22	·76	·25	·23	·76	·25
Puerperal Hæmorrhage ... ..	·36	·76	·38	·36	·76	·38
Puerperal Septicæmia ... ..	·22	...	·21	·23	...	·22
Post Abortive Septicæmia ... ..	·22	...	·21	·23	...	·22
Albuminuria and Eclampsia ... ..	·86	1·51	·88	·86	1·54	·89
Thrombophlebitis, Embolism, Sudden Death.	·36	·76	·38	·36	·76	·38
Other Casualties of Childbirth... ..	·24	...	·23	·24	...	·23
Total, excluding Criminal Abortion	2·48	3·79	2·54	2·51	3·82	2·57
Criminal Abortion ... ..	·38	3·40	·50	·38	3·44	·51
Total, including Criminal Abortion	2·86	7·19	3·04	2·89	7·26	3·08
1945.						
Accidents of Pregnancy ... ..	·33	·36	·33	·33	·36	·34
Puerperal Hæmorrhage ... ..	·26	·36	·27	·27	·36	·27
Puerperal Septicæmia ... ..	·12	...	·11	·12	...	·11
Post Abortive Septicæmia ... ..	·07	·71	·09	·07	·73	·10
Albuminuria and Eclampsia ... ..	·63	·36	·62	·63	·36	·62
Thrombophlebitis, Embolism, Sudden Death.	·22	...	·21	·22	...	·21
Other Casualties of Childbirth... ..	·31	...	·30	·32	...	·30
Total, excluding Criminal Abortion	1·94	1·79	1·93	1·96	1·81	1·95
Criminal Abortion ... ..	·25	·71	·27	·25	·72	·28
Total, including Criminal Abortion	2·19	2·50	2·20	2·21	2·53	2·23

Note—See notes under Table 97, also text.

The proportion of maternal deaths due to each cause in 1944 and 1945 is shown below in comparison with the average for the five years 1941-45.

TABLE 100.—Maternal Deaths, Proportion each Cause, 1941 to 1945.

Cause of Death.	Proportion per cent. due to each Cause.								
	1944.			1945.			1941-45.		
	Married.	Single.	Total.	Married.	Single.	Total.	Married.	Single.	Total.
Accidents of Pregnancy ...	7.78	10.53	8.06	15.15	14.29	15.11	10.72	11.11	10.75
Puerperal Hæmorrhage ...	12.58	10.53	12.37	12.12	14.29	12.23	13.17	4.94	12.46
Puerperal Septicæmia ...	7.78	...	6.99	5.30	...	5.03	9.33	4.94	8.95
Post Abortive Septicæmia	7.78	...	6.99	3.03	28.56	4.32	6.41	12.35	6.92
Albuminuria and Eclampsia	29.94	21.04	29.03	28.79	14.29	28.06	24.59	13.58	23.64
Thrombophlebitis, Embolism									
Sudden Death ...	12.58	10.53	12.37	9.85	...	9.35	10.37	3.70	9.80
Other Casualties of Child-birth ...	8.39	...	7.52	14.40	...	13.67	13.06	2.47	12.14
Total, excluding Criminal Abortion ...	86.83	52.63	83.33	88.64	71.43	87.77	87.65	53.09	84.66
Criminal Abortion ...	13.17	47.37	16.67	11.36	28.57	12.23	12.35	46.91	15.34
Total, including Criminal Abortion ...	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Note—See notes under Table 97; also text.

In the five years 1941-45, criminal abortion caused 47 per cent. of the puerperal deaths of single women.

#### *Deaths from Violence.*

Deaths from violence are deaths from accident (including deaths in respect of which "open verdicts" were recorded at Coroners' inquests), suicide and homicide. In proportion to the population the annual number of suicides has not shown any marked variation. Deaths from homicide have remained fairly constant in number, and their proportion to the population has decreased.

Deaths from violence in 1945 numbered 1,528 or 5.7 per cent. of the total deaths in the year. This number includes 254 suicides, 1,240 accidents and 34 homicides. The rate, 5.27 per 10,000 living, was 8 per cent. below the rate in the preceding quinquennium, which was 5.71. In the year 1945 the males numbered 1,059 or 7.31 per 10,000 living, and the females 469 or 3.23 per 10,000, which is 44 per cent. of the male rate.

#### *Deaths from Suicide.*

The number of persons who took their own lives in 1945 was 254 and the rate, 0.88 per 10,000 living, was 2 per cent. above the average for the preceding quinquennium. The number of suicides by males was 183, and the rate, 1.26 per 10,000 living, was 157 per cent. greater than the rate amongst females, 0.49 per 10,000 living.

The number of deaths from suicide and the rates since 1899 are shown in the following table:—

TABLE 101.—Suicide, 1899 to 1945.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1899-1903	651	1·81	142	0·44	793	1·16
1904-1908	719	1·86	160	0·49	879	1·18
1909-1913	857	1·95	238	0·59	1,095	1·30
1914-1918	888	1·83	223	0·48	1,111	1·17
1919-1923	887	1·65	244	0·47	1,131	1·07
1924-1928	1,100	1·84	269	0·47	1,369	1·16
1929-1933	1,244	1·92	301	0·48	1,545	1·21
1934-1938	1,235	1·83	367	0·56	1,602	1·20
1939-1943	1,008	1·44	348	0·50	1,356	0·97
1938	254	1·85	76	0·56	330	1·21
1939	251	1·81	78	0·57	329	1·20
1940	226	1·62	83	0·60	309	1·11
1941	184	1·31	63	0·45	247	0·88
1942	179	1·27	74	0·53	253	0·90
1943	168	1·18	50	0·35	218	0·77
1944	150	1·04	88	0·61	238	0·83
1945	183	1·26	71	0·49	254	0·88

The means usually adopted for self-destruction by men are either shooting, poisoning, cutting, or hanging. Women, as a general rule, avoid weapons, and resort mostly to poison. Of every 100 cases of suicide during the five years 1941-45, 18 were by the agency of poison, 20 by shooting, 18 by gas, 11 by cutting, 14 by hanging, 9 by drowning, and 10 by other means.

Experience indicates that the suicidal tendency is probably influenced by the seasons. During the last ten years, 1936-45, the proportion of male suicides per 1,000 was approximately as follows:—In spring, 249, summer, 263, autumn, 240, and winter 248. Female suicides, being numerically smaller, give more variable results as to seasonal trends; in the last ten years the proportion per 1,000 was—spring, 261, summer 262, autumn, 245, winter, 232.

#### *Deaths from Accident.*

During the year 1945, the number of deaths due to accident was 1,240, viz., 853 of males and 387 of females, or equal to rates of 5·89 and 2·67 per 10,000 living of each sex, and the general rate was 4·28 per 10,000 living.



The number of deaths from accident and the rates since 1884 are shown in the table below. The figures for 1927 and later years include deaths in respect of which an "open verdict" was given.

TABLE 102.—Accident, 1884 to 1945.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	3,550	13·41	944	4·34	4,494	9·32
1889-93	3,666	11·90	966	3·70	4,632	8·14
1894-98	3,498	10·33	1,095	3·69	4,593	5·23
1899-1903	3,432	9·54	1,103	3·39	4,535	6·62
1904-1908	3,145	8·13	1,056	2·96	4,201	5·65
1909-1913	3,894	8·84	1,119	2·79	5,013	5·95
1914-1918	3,821	7·87	1,088	2·34	4,909	5·17
1919-1923	3,677	6·85	1,102	2·13	4,779	4·54
1924-1928	4,860	8·11	1,363	2·37	6,223	5·30
1929-1933	4,748	7·83	1,389	2·21	6,137	4·80
1934-1938	5,082	7·53	1,588	2·41	6,670	5·00
1939-1943	5,272	7·51	1,823	2·62	7,095	5·08
1941	1,049	7·49	335	2·41	1,384	4·96
1942	990	7·00	355	2·53	1,345	4·77
1943	853	5·99	353	2·49	1,206	4·24
1944	859	5·98	359	2·50	1,218	4·24
1945	853	5·89	387	2·67	1,240	4·28

The figures in the table include deaths due to inattention at birth, and, prior to 1896, injury at birth and traumatic tetanus.

The experience of the five years ended 1945 shows that out of every 1,000 fatal accidents 257 are due to road transport accidents, 98 to drowning, 268 to falls, 87 to railway or tramway accidents, 60 to burns or scalds, and 22 to accidents in mines and quarries. Fatalities due to weather, i.e., excessive cold or heat, or lightning were responsible for 13 in every 1,000 but this number fluctuates appreciably according to the severity of seasonal conditions.

Out of 322 deaths caused by road transport accidents in 1945, 268 were due to accidents in which a motor vehicle was involved, and 32 to tram accidents.

Detailed statistics relating to fatal and non-fatal traffic accidents are published in the chapter "Trade, Transport and Communication" of this Year Book.

## THE SEASONAL PREVALENCE OF DISEASES.

The following table shows for each month of the year the proportion of deaths due to each of nine principal causes. The figures are based on the experience of the five years 1941-45, and in order to make the results of the computation comparable, adjustments have been made to correct the inequality of the number of days in each month:—

TABLE 103.—Seasonal Prevalence of Diseases, 1941-45.

Month.	Typhoid Fever.	In- fluenza.	Diph- theria and Croup.	Whoop- ing- Cough.	Tuberculosis of the Respiratory System.	Pneu- monia.	Bron- chitis.	Diarrhœa, Enteritis, and Dysentery.	Neph- ritis.
Deaths in month (adjusted) per 1,000 deaths from cause.									
January ...	39	31	76	178	78	58	43	132	74
February..	384	28	105	138	80	64	51	146	72
March ...	76	32	95	96	77	58	38	105	68
April ...	76	46	92	45	77	60	64	68	81
May ...	39	28	128	50	84	83	88	67	81
June ...	39	225	96	33	99	108	136	59	98
July ...	39	180	100	38	95	128	157	56	99
August ...	39	168	65	67	89	140	152	57	99
September,	39	125	63	111	83	102	102	55	94
October ...	...	53	47	96	80	77	71	74	86
November,	76	45	81	60	87	67	50	72	77
December .	154	39	52	88	71	55	48	109	71
	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

In interpreting the foregoing table comparison should be made vertically and not horizontally; the figures are proportions per thousand and not absolute numbers.

The chief feature of the foregoing table is the contrast between the figures relating to typhoid fever and diarrhœa and enteritis on the one hand, and to influenza, pneumonia, and bronchitis on the other. In the first group the influence of the hot weather is the controlling factor; in the second, the cold. The warmest months in the year are January, February, and December; the coldest, June, July and August. The morbidity from tuberculosis of the respiratory system varies little throughout the year, but it is somewhat higher in the colder months. Nephritis also shows a higher mortality during the cold weather.

## OVERSEA TRADE.

The Commonwealth Parliament makes laws with respect to trade and commerce with other countries and between the States of Australia.

The first Federal Act relating to customs came into operation by proclamation on 4th October, 1901. The Act, with amendments, provides administrative machinery in relation to customs, prescribes the manner in which duties are to be computed and paid, and authorises the inspection of imports and exports.

Prior to federation a different tariff was in operation in each State, and interstate trade was subject to the same duties as oversea trade. On 8th October, 1901, when the Customs Tariff Act of 1902 was introduced in the Federal Parliament, a uniform tariff for all the States was imposed, trade and commerce between the States became free, and the power of the Commonwealth to impose duties of customs and excise became exclusive, except that the State of Western Australia was given the right to levy duty on interstate imports for a period of five years.

By the Customs Act certain imports are prohibited, and the prohibition may be extended by regulation to other commodities. The conditions under which goods for export are prepared may be prescribed by regulation, and the exportation of goods which do not conform to the required standards may be prohibited. In terms of the Commerce (Trade Descriptions) Act, 1905-1933, the importation or exportation of any goods may be prohibited by regulation unless they bear a prescribed trade description.

Matters relating to trade and customs are administered by the Federal Department of Trade and Customs which is under the direction of a Commonwealth Minister of the Crown.

Regulations under the Banking Act, 1945, providing for the control of foreign exchange, prohibit the importation or exportation of goods except under a license under the regulations, and prescribe the terms and conditions to which such licenses may be subject.

The Tariff Board was appointed to assist the Minister under an Act which came into operation in March, 1922. The Board consists of four members, including an administrative officer of the Department of Trade and Customs, who is chairman. The Tariff Board Act, 1921-1934, prescribes that the Minister shall refer to the Board for investigation such matters as appeals against the decisions of the Comptroller-General in respect of the interpretation of the tariff; the necessity for new, increased, or reduced duties or for bounties; the effect of bounties; proposals for applying preferential tariffs to any country; and questions whether a manufacturer is taking undue advantage of the protection afforded by the tariff to charge unnecessarily high prices. In addition, the Minister may refer to the Board for inquiry matters relating to the classification of goods under by-law items in the tariff or to the determination of the value of goods for duty, and he may request it to report as to the effect of the customs and excise tariffs and of the customs laws on the industries of the Commonwealth, and on other matters affecting the encouragement of industries in relation to the tariff.

National Security (Inquiries) Regulations issued on 2nd April, 1941, and which terminated on 31st December, 1946, empowered the Minister to direct the Tariff Board to inquire into matters relating to the public safety and defence of the Commonwealth and its territories.

The Commonwealth Department of Commerce and Agriculture supervises matters relating to the oversea marketing of Australian produce. Its functions include the collection and dissemination of commercial and industrial data, the supervision of the grade and quality of goods exported, the investigation of matters affecting trade, commerce and industry, and the control of the Trade Commissioner service abroad. The department is under the control of a Minister of the Crown.

Under the Commerce (Trade Descriptions) Act official control is exercised over the preparation, manufacture, quality, grading, packing and labelling of practically all foodstuffs exported.

A number of marketing organisations has been constituted by the Commonwealth to control the export and distribution abroad of certain Australian commodities.

Trade representation abroad is conducted by Trade Commissioners who have been appointed for service in the United Kingdom, Canada, New Zealand, South Africa, India, Egypt, the Middle East, Malaya, Hong Kong, the United States of America, Netherlands East Indies and Ceylon, by Commercial Secretaries in France and Brazil, and by a Commercial Attache in Chile. The Agent-General is the official representative of the Government of New South Wales in London.

#### CONTROL OF OVERSEA TRADE—WAR-TIME REGULATIONS.

Upon the outbreak of war in September, 1939, regulations were promulgated under the Customs Act for the control of oversea trade, to conserve supplies of foreign exchange and to ensure that resources were used to the best advantage for war and other essential purposes.

Control over the export of goods was exercised under the Customs (Oversea Exchange) Regulations (described in the preceding edition of the Year Book) until 16th December, 1943, when these were superseded by National Security (Exchange Control) Regulations. Under the Exchange Control regulations oversea funds arising from goods exported accrued to the Commonwealth Bank and the exporter was paid the equivalent value in Australian currency by the Bank or its agent. Export transactions not specifically exempted were required to be covered by a license.

These measures were reinforced by proclamations under section 112 (A) of the Customs Act, which restricted or prohibited the export of some 900 kinds or classes of goods, with the objects of safeguarding local supplies, facilitating control of prices and controlling the export of commodities of the kinds affected by Empire marketing arrangements. Export permits were granted for shipment to British and Allied countries of goods surplus to Australian requirements. Special conditions were imposed under permits granted for the export of goods to neutral countries to prevent them falling into enemy hands.

The Customs (Import Licensing) Regulations promulgated on 1st December, 1939, were applied initially only to countries outside the sterling area to eliminate non-essential imports and thereby to conserve foreign

exchange. From December, 1941, goods from the United Kingdom and other sterling countries were brought under these regulations which were made progressively more stringent to conform to the needs of total war, including the conservation of shipping space. Importation of some classes of goods was prohibited; some other classes were admitted on a percentage basis (quantity or value) relative to imports in 1938-39, and certain classes of goods (*e.g.*, machinery) were placed under "administrative control," each application being dealt with on its merits without reference to past importations.

After the cessation of hostilities successive revisions removed many classes of goods from the prohibited or quota basis lists. The restrictive effect of the regulations diminished greatly in respect of United Kingdom goods and was modified considerably as regards imports from other sterling countries.

#### *Mutual Aid Agreements.*

The United States Lend-Lease Act, which became effective on 11th March, 1941, empowered the United States Government to assist foreign Governments whose defence the President deemed vital to the defence of the United States by supplying them with goods and services for war purposes. Such aid might be supplied on terms and conditions which the President deemed satisfactory and "the benefit to the United States might be payment or repayment in kind or property or any other direct or indirect benefit."

A Lend-Lease agreement between the United States and Australia was signed on 3rd September, 1942, defining the undertaking of each Government to make available to the other, on Lend-Lease terms, material aid for the prosecution of war. The general principle of the agreement was that the war production and resources of both nations should be used by the armed forces of each in the ways which most effectively utilised available materials, manpower, production facilities and shipping space. With the ending of hostilities in the Pacific the provision of aid between the two countries in accordance with the agreement terminated on 22nd August, 1945.

Under a final settlement made in 1946, neither Government made payment for articles or services used during the war; each retained articles in possession of its armed forces (subject to right of repossession in exceptional circumstances); and Australia paid the United States £A8,400,000 for machine tools, etc., and non-combat aircraft and spare parts remaining in Australia, and £A2,000,000 for army and navy surpluses. Of the total, £A2,200,000 was in Australian currency, principally to acquire real estate and construct United States Government buildings in Australia, and the balance was paid in United States dollars.

A mutual aid agreement between Canada and Australia was signed on 9th March, 1944. Each country agreed to provide essential goods and services for the joint prosecution of the war on terms of mutual aid. The policy of supply without payment was adopted in order to avoid the creation of war debts which might dislocate and reduce the flow of post-war trade. The agreement terminated on 2nd September, 1945, with the surrender of Japan.

## INTERNATIONAL TRADE ORGANISATION.

The proposals for an international trade organisation as part of the United Nations Organisation had their genesis in war-time mutual aid agreements with the United States of America. The agreement with Australia, as did those with other countries, recognised the principle of promoting, by appropriate international and domestic measures, production, employment, and the interchange and consumption of commodities, and the need to reduce or remove tariff and other barriers impeding international trade.

A Preparatory Committee of the International Conference on Trade and Employment sponsored by the United Nations Economic and Security Council was constituted early in 1946 and in September of that year a suggested charter for an International Trade Organisation was discussed in London by the Preparatory Committee, upon which Australia is represented. At that meeting it was accepted in principle that the charter must be concerned to advance the aims of full employment and economic development and not merely to promote the reduction of trade barriers.

At Geneva, in April, 1947, the Preparatory Committee considered the proposed charter further and simultaneously sponsored negotiations for tariff variations on a country-to-country and product-by-product basis. In the latter connection Australia published schedules (a) of items regarding which other countries had signified a desire to negotiate, (b) of items upon which tariff concessions were proposed to be sought by Australia, and (c) of certain Australian goods given preferential treatment in British markets which might be affected by negotiations. A draft charter for the International Trade Organisation was adopted by delegates of seventeen nations at Geneva on 22nd August, 1947, and was considered at a further world trade conference held at Havana beginning on 21st November, 1947. Simultaneously, details of tariff changes arising out of the Geneva discussions were advanced toward finality by negotiations between the countries affected.

## STATISTICS OF IMPORTS AND EXPORTS.

Statistics relating to the overseas trade of the various States of Australia are recorded by the Commonwealth Statistician. The records of imports as shown in this chapter include those re-exported for consumption in other States or elsewhere. Exports classified as "Australian Produce" include products of other Australian States which have been shipped overseas at ports in New South Wales, but they do not include products of New South Wales despatched abroad from ports in other States.

Complete records of interstate trade have not been available since 12th September, 1910, when the Customs Department ceased to record them.

## OVERSEA TRADE.

The values, as shown in the following tables relating to goods imported and exported overseas, are based on the values recorded by the Department of Trade and Customs.

*Valuation of Imports.*

*The value of goods imported* represents the amount on which duty is payable or would be payable if the duty were *ad valorem*, such value being the sum of the following:—(a) The actual price paid by the Australian importer plus any special deduction, or the current domestic value in the country of export at the date of exportation, whichever is the higher; (b) all charges for placing the goods free on board at the port of export; and (c) 10 per cent. of the amounts (a) and (b).

The value of imports is recorded in British currency, though the term is not strictly synonymous with "currency of the United Kingdom" (sterling) since values of imports expressed in £ s. d. are regarded for duty purposes as being in British currency. This applies in particular to imports from New Zealand, Fiji and the Union of South Africa when the currencies of these countries are not at par with the currency of the United Kingdom (sterling). No adjustment on this account has been made in the tables of this chapter when the term sterling has been used as synonymous with British currency. Conversion to British currency in the case of imports in other currencies is based on the commercial rates of exchange.

*Valuation of Exports.*

*The value of goods exported* is recorded in Australian currency and includes the cost of containers. Until 1st July, 1937, most commodities were assessed at their value in the principal markets in Australia, though a different method as described in the Official Year Book, 1938-39, was adopted at various dates for sugar, wool, wheat, flour and butter.

Since 1st July, 1937, the values of exports generally have been assessed as follows:—

- (1) Goods sold to overseas buyers before export—the f.o.b. equivalent of the price at which the goods were sold, e.g., as regards wool, the actual price paid by the overseas buyer plus the cost of all services incurred by him in placing the wool on board ship.
- (2) Goods shipped on consignment—the Australian f.o.b. equivalent of the current price offering for similar goods in the principal markets of the country to which the goods were despatched for sale. As regards wool, the f.o.b. equivalent of the current price ruling in Australia normally provides a sufficient approximation of the f.o.b. equivalent of the price ultimately received.

*"Civil" Oversea Trade in the War Years.*

Lend-Lease and mutual aid agreements resulted in heavy imports and exports on Commonwealth Government account. These are included in the trade statistics, and in comparing total trade in 1939-40 and later years with pre-war years allowance should be made accordingly. In Table 104 the figures for the years 1943-44 to 1945-46 distinguish "civil" imports and "civil" exports separately from duty free imports of the Commonwealth and from shipments overseas on behalf of the Commonwealth.

Civil imports exclude goods admitted under Customs tariff item 370, viz., "articles imported by or being the property of the Commonwealth not being for purpose of trade." All goods admitted under other tariff items, irrespective of whether they were for direct or indirect Government use, are included

in civil imports. In this dissection, civil exports exclude all goods shipped overseas by the Commonwealth Government other than shipments under commodity contracts with the United Kingdom Government. Particulars of trade according to classes and sub-classes of goods distinguished in this way are available for the Commonwealth but not for individual States.

Imports into Australia on Government account rose from about £A5,000,000 in 1938-39 and £A24,000,000 in 1940-41 to £A79,000,000 in 1941-42 and to £A177,000,000 in 1942-43, and then decreased gradually to £A72,000,000 in 1945-46. Government exports from Australia were greatest in value in 1943-44 and 1944-45 at about £A42,000,000 in each year.

In the following dissection of total trade, the figures for civil trade are approximately comparable with total trade figures for years before the war as they exclude the abnormal war-time trade in war materials and supplies:—

TABLE 104.—Value of Direct Oversea Trade (Merchandise Only) on Civil and Government Account, Australia and New South Wales, 1943-44 to 1945-46.

(Values Expressed in Australian Currency.)

Particulars.	Australia.			New South Wales.		
	1943-44.	1944-45.	1945-46.	1943-44.	1944-45.	1945-46.
Imports—Civil ... ..	£A000. 97,758	£A000. 100,237	£A000. 122,762	£A000. 46,757	£A000. 48,320	£A000. 56,522
Government ... ..	165,303	132,784	71,810	77,063	75,869	38,322
Total Imports (Merchandise)	263,061	233,021	194,572	123,820	124,189	94,844
Exports—Civil ... ..	104,120	112,923	167,863	35,322	37,502	57,360
Government ... ..	42,552	42,330	28,561	18,757	23,325	10,030
Total Exports (Merchandise)	146,672	155,262	196,424	54,079	60,827	76,390

In the above table and tables which follow, imports for which Customs entries were delayed are recorded in the year in which the entry was passed. Export figures for Australia include unentered exports on Government account estimated at £A12,600,000 in 1941-42, £A2,500,000 in 1942-43, £A10,000,000 in 1943-44, and £A2,000,000 in 1944-45. These amounts cannot be apportioned amongst the States and no account is taken of them in New South Wales trade statistics in this chapter.

The amounts payable for imports or receivable for exports during the war years are not indicated accurately by the recorded trade figures. Exports to Australian forces and imports and exports under Lend-Lease and mutual aid arrangements required no current payment, and payments were made under contracts by the United Kingdom Government for wool and some minor items irrespective of actual shipment of these, as well as for some unrecorded exports of war material. Moreover, certain war material was recorded in trade statistics in years later than those in which payment was made for it by Australia.

Goods imported or exported direct by Allied forces temporarily resident in New South Wales were excluded from the trade statistics of the war years.



The values quoted above are stated in Australian currency which was depreciated in relation to the currency of the United Kingdom in 1930-31.

The average annual value in Australian currency of imports and exports of merchandise to and from New South Wales in the years 1936-37 to 1938-39 was £55,297,000 and £44,021,000 respectively. In civil trade in 1945-46 the values were £56,522,000 for imports and £57,360,000 for exports, showing increases for imports of two per cent. and for exports of thirty per cent. compared with the pre-war period. The much higher level of prices was a major factor in these increases and it is apparent that in point of volume civil overseas trade in 1945-46 had not regained the pre-war level.

*Oversea Imports and Exports—Value.*

The total value in Australian currency of overseas imports and exports of New South Wales relative to those of Australia, as recorded by the Customs Department, during various years from 1920-21 to 1945-46 is shown in the following table, with the value per head of population. The figures do not include the value of exports in the form of ships' stores.

In the total overseas trade of Australia the share of New South Wales was 42.5 per cent. in the five years 1934-35 to 1938-39. In merchandise only, in 1945-46, New South Wales exports were 38.9 per cent. and imports 48.7 per cent. of the Commonwealth totals. A relatively high share of imports is usual; Sydney is the port of entry for some merchandise destined ultimately for other States.

TABLE 105.—Overseas Imports and Exports, New South Wales and Australia, Including Bullion and Specie, 1920-21 to 1945-46.\*

(Values expressed in Australian Currency.)

Year ended 30th June.	N.S.W. Overseas Imports.	N.S.W. Overseas Exports.			N.S.W. Total Trade Overseas.	Australia. Total Trade Overseas.
		Australian Produce.	Other Produce.	Total.		
	£A	£A	£A	£A	£A	£A
1921	72,466,388	48,302,717	4,299,039	52,601,803	125,038,194	295,960,738
1929	63,491,123	47,170,407	2,118,483	49,288,890	112,780,013	288,498,333
1931	29,817,013	30,346,929	1,517,998	31,864,927	61,681,940	173,162,918
1932	23,948,174	33,147,646	1,549,907	34,697,553	58,645,727	164,934,417
1939	58,050,811	41,527,687	4,375,393	45,903,080	103,953,891	268,447,143
1940	68,753,460	67,370,087	3,023,660	70,393,747	139,147,297	320,477,767
1941	60,869,290	61,435,967	1,991,738	63,427,705	124,296,995	297,340,553
1942	70,216,541	62,425,210	1,711,704	64,136,914	134,353,455	350,363,421
1943	108,158,991	51,779,355	2,483,970	54,263,325	162,422,316	391,646,142
1944	127,589,089	51,845,268	2,243,615	54,088,883	181,677,972	414,997,878
1945	126,916,283	58,220,694	2,616,194	60,836,888	187,753,171	391,348,555
1946	96,518,492	73,650,963	3,100,312	76,841,275	173,359,767	419,655,581
PER HEAD OF POPULATION.						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1921	34 13 4	23 2 2	2 1 1	25 3 3	59 16 7	54 14 1
1929	25 11 3	18 19 9	0 17 1	19 16 10	45 8 1	45 8 4
1931	11 14 3	11 18 6	0 12 0	12 10 6	24 4 9	26 13 0
1932	9 6 6	12 18 2	0 12 1	13 10 3	22 16 9	25 3 5
1939	21 4 8	15 3 10	1 12 0	16 15 10	38 0 6	38 15 0
1940	24 18 1	24 8 1	1 1 11	25 10 0	50 8 1	45 16 1
1941	21 17 6	22 1 7	0 14 4	22 15 11	44 13 5	42 1 2
1942	25 1 1	22 5 6	0 12 3	22 17 9	47 18 10	50 7 0
1943	38 4 2	18 5 10	0 17 6	19 3 4	57 7 6	54 8 1
1944	44 13 10	18 3 2	0 15 9	18 18 11	63 12 9	57 2 3
1945	43 19 11	20 3 7	0 18 2	21 1 9	63 1 8	53 7 1
1946	33 2 9	25 5 8	1 1 11	26 7 7	59 10 4	56 12 0

\* See text following Table 104.

On the average the addition to the sterling value of exports arising from the premium on oversea exchange was nearly 18 per cent. in 1930-31, 27 per cent. in 1931-32, and 25 per cent. since 1932-33. Particulars of the rates of exchange are shown in the chapter of this volume entitled Private Finance.

The following table shows particulars relating to the oversea trade of the State since 1920-21, similar to those in Table 105, with values expressed in British currency. Exports in the form of ships' stores are not included.

TABLE 106.—Oversea Imports and Exports (N.S.W.), 1920-21 to 1945-46.\*  
(Values expressed in British Currency.)

Year ended 30th June.	Oversea Imports.	Oversea Exports.			Total Trade Oversea.
		Australian Produce.	Other Produce.	Total.	
	£stg.	£stg.	£stg.	£stg.	£stg.
1921	72,466,388	48,302,717	4,299,089	52,601,806	125,068,194
1931	26,311,411	25,745,092	1,276,732	27,021,824	53,333,235
1932	18,797,584	26,058,705	1,223,590	27,282,295	46,079,879
1939	46,347,953	33,164,077	3,498,109	36,662,186	83,010,139
1940	54,892,982	53,813,570	2,416,763	56,230,333	111,123,315
1941	48,598,236	49,071,883	1,591,003	50,662,886	99,261,122
1942	56,061,111	49,853,731	1,367,037	51,220,768	107,281,879
1943	86,354,484	41,340,803	1,983,209	43,324,012	129,678,496
1944	101,867,536	41,393,427	1,791,309	43,184,736	145,052,272
1945	101,330,366	46,483,588	2,088,778	48,572,366	149,902,732
1946	77,060,672	58,803,164	2,547,155	61,350,319	138,410,992

PER HEAD OF POPULATION.					
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1921	34 13 4	23 2 2	2 1 1	25 3 3	59 16 7
1931	10 6 10	10 2 3	0 10 1	10 12 4	20 19 2
1932	7 6 5	10 3 0	0 9 6	10 12 6	17 18 11
1939	16 19 1	12 2 7	1 5 7	13 8 2	30 7 3
1940	19 17 8	19 9 10	0 17 6	20 7 4	40 5 0
1941	17 9 4	17 12 9	0 11 5	18 4 2	35 13 6
1942	20 0 1	17 15 10	0 9 9	18 5 7	38 5 8
1943	30 10 1	14 12 1	0 14 0	15 6 1	45 16 2
1944	35 13 8	14 10 0	0 12 6	15 2 6	50 16 2
1945	35 2 6	16 2 3	0 14 6	16 16 9	51 19 3
1946	26 9 1	20 3 9	0 17 6	21 1 3	47 10 4

\* See comments following Table 104.

In 1920-21 the value of imports was abnormally high because of the rapid inflow of goods ordered abroad during the trade expansion following the 1914-18 war in the anticipation of supply and shipping difficulties. After a decline in 1921-22 the value rose rapidly and remained at a high level for several years. Imports declined about 10 per cent in value in 1929-30, and continued to decrease until, in 1931-32, the value (in British currency) was less than 30 per cent. of the value in 1928-29. The economic depression, measures taken to adjust the adverse Australian balance of trade, and lower import prices were the major factors in the decrease. Throughout this period the total value of exports was affected, but less drastically because an increase in volume partially offset low prices; between 1928-29 and 1930-31 the decrease was approximately 45 per cent.

Recovery of overseas trade began in 1932-33, and there was an average annual increase in imports of £stg4,400,000 during the years 1932-33 to 1936-37, and a further increase of £stg10,000,000 in 1937-38. Even so, the value in British currency was nearly 20 per cent. less than in 1928-29. Imports and exports decreased in 1938-39 but subsequently increased markedly as a result of the movement of munitions and supplies for war (especially under Lend-Lease and Mutual Aid agreements) and the upward trend of prices of both exports and imports.

In 1945-46 "civil" trade, valued in British currency, exceeded that in the pre-war year, but on account of higher prices was considerably smaller in volume than in the years 1935-36 to 1938-39.

Products of the primary industries comprise the bulk of the exports from New South Wales and seasonal conditions cause great variation in the quantities available for shipment overseas. Wide fluctuations in prices of the principal export commodities, added to changes in volume, render the total value of exports liable to sharp increase or decrease from year to year. The export of manufactures and semi-manufactures, such as textiles and clothing, iron and steel, electrical and other machinery, has become of considerable importance in recent years.

Particulars of the quantity and value of the principal commodities exported are shown in Tables 112 and 113 of this chapter, and further particulars are published in the Statistical Register of New South Wales.

*Overseas Imports and Exports of Merchandise.*

The annual values of imports and exports shown in Tables 105 and 106 include consignments of bullion and specie (mainly gold), which are to be regarded as relating to the trade of the Commonwealth rather than of New South Wales, and are excluded from the following statement.

TABLE 107.—Imports and Exports of Merchandise (N.S.W.),  
1920-21 to 1945-46.\*

Year ended 30th June.	Imports.	Exports.			Imports.	Exports.		
		Australian Produce.	Other.	Total.		Australian Produce.	Other.	Total.
	£000	£000	£000	£000	£000	£000	£000	£000
<i>Australian Currency Values.</i>					<i>British Currency Values.</i>			
1921 ...	72,437	44,533	4,284	48,817	72,437	44,533	4,284	48,817
1931 ...	29,538	28,885	1,289	30,174	26,071	24,603	1,098	25,701
1938 ...	61,677	41,209	1,384	42,593	49,242	32,901	1,105	34,006
1939 ...	55,041	36,320	1,367	37,687	43,945	28,948	1,091	30,039
1940 ...	64,439	51,654	1,350	53,004	51,449	41,240	1,078	42,318
1941 ...	57,656	48,129	1,493	49,622	46,033	38,426	1,192	39,618
1942 ...	67,823	54,100	1,457	55,557	54,150	43,194	1,163	44,357
1943 ...	106,438	51,776	2,482	54,258	84,931	41,338	1,982	43,320
1944 ...	123,820	51,842	2,237	54,079	98,858	41,391	1,786	43,177
1945 ...	124,189	58,211	2,616	60,827	99,152	46,476	2,089	48,565
1946 ...	94,844	73,530	2,860	76,390	75,724	58,706	2,284	60,990

\*See comments following Table 104.

## DIRECTION OF TRADE.

In pre-war years interchange between New South Wales and other British countries usually showed a pronounced excess of imports from the United Kingdom, Canada, India and Ceylon, and an excess of exports to New Zealand and the Pacific Islands. The excess of imports in trade with the United Kingdom was approximately £stg7,300,000 in 1938-39, and £stg13,800,000 in 1945-46, and in trade with Canada was about £stg2,900,000 and £stg2,700,000, respectively. With India and other British eastern countries there was an excess of exports of about £stg600,000 in 1945-46 compared with an import surplus of about £stg1,450,000 in the pre-war year. Exports to, exceeded imports from New Zealand by about £stg2,750,000 in 1938-39 and by about £stg2,150,000 in 1945-46.

With most foreign countries with which pre-war interchanges were large, *e.g.*, France, Germany, Italy, Belgium and Japan, there was a substantial excess of exports, but with the United States of America and the Netherlands East Indies an excess of imports was usual. Dislocations and biases arising from the war were still affecting international trade in 1945-46. In that year trade with the United States showed the large excess of imports of over £stg10,500,000, with Continental Europe an export surplus of about £stg5,700,000, and with the Netherlands East Indies an excess of exports of nearly £stg640,000. There were practically no imports against the export of goods valued at £A1,635,000 to Japan in 1945-46.

The direction of the overseas trade of New South Wales is indicated in the following statement, which shows the value of imports from and of exports to the principal countries during the years 1938-39 and 1941-42 to 1945-46. Imports and exports of bullion and specie are not included. Particulars regarding the imports relate to the country of origin and the values are expressed in British currency. The values of exports are expressed in Australian currency.

TABLE 108.—Direction of Oversea Trade of N.S.W., Merchandise  
1938-39 to 1945-46.\*

Country.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Imports of Merchandise (Country of Origin).						
	£stg.	£stg.	£stg.	£stg.	£stg.	£stg.
United Kingdom ...	17,735,702	23,044,124	31,597,813	27,853,369	35,656,542	26,309,871
Canada ...	3,402,942	2,981,637	5,284,559	5,527,014	4,588,070	3,457,283
Union of South Africa ...	128,979	324,040	213,990	218,691	281,239	375,547
India and the East ...	2,604,024	6,832,192	9,113,837	12,482,090	10,724,082	8,176,721
New Zealand ...	802,113	575,379	597,231	471,074	888,566	1,082,425
Pacific Islands ...	505,300	456,145	131,381	344,131	1,059,129	454,594
Other British Possessions ...	322,970	1,385,208	2,425,224	2,148,275	1,237,806	1,578,263
Total, British ...	25,502,030	35,598,725	49,344,035	49,075,544	54,465,434	41,434,704
France and Belgium ...	984,231	4,350	15,398	515	1,256	22,464
Other European Countries ...	4,197,802	256,186	156,642	156,219	160,929	690,105
United States and Hawaii ...	7,030,786	11,611,847	32,279,830	45,089,637	36,496,403	19,956,042
Japan ...	1,778,829	153,160	3,757	65	3	1,507
Netherlands East Indies ...	2,597,981	3,861,451	191,530	26,138	13,769	3,928
China and other Eastern Countries ...	635,194	991,829	546,228	672,073	3,743,286	5,351,997
Pacific Islands ...	31,909	252,025	412,777	301,111	168,035	128,626
Other Foreign Countries ...	207,286	304,287	995,589	1,617,501	2,420,021	1,300,075
Total, Foreign ...	17,464,078	17,525,135	34,601,751	47,863,259	43,003,702	27,455,644
Country not stated ...	...	1,734	...	88,242	1	5,528,350
Outside Packages and Containers ...	978,587	1,024,843	1,034,950	1,831,175	1,633,571	1,305,121
Total, Imports ...	43,944,695	54,150,437	84,980,736	98,858,220	99,152,708	75,723,819

\* See comments following Table 104.

TABLE 108—*continued*.\*

Country.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Exports of Merchandise (Country of Destination).						
	£A	£A	£A	£A	£A	£A
United Kingdom ... ..	13,107,027	10,635,047	12,293,240	11,941,914	15,293,480	15,621,327
Canada ... ..	607,853	1,001,404	741,796	976,697	938,896	929,130
Union of South Africa ...	158,730	890,147	555,600	393,007	623,311	782,429
India and the East ... ..	1,432,385	5,546,880	3,370,416	6,362,579	7,377,914	11,950,247
New Zealand ... ..	4,270,151	3,753,802	3,917,939	3,363,918	3,164,142	3,781,783
Pacific Islands ... ..	1,615,824	2,245,793	14,543,812	9,701,616	7,068,508	4,788,407
Other British Possessions	257,560	297,855	211,684	402,508	119,100	216,339
Total, British ... ..	21,449,539	24,370,928	35,634,487	33,142,239	34,585,360	38,069,662
France and Belgium ... ..	6,511,210	...	...	...	101,739	6,598,489
Other European Countries	2,975,846	596,332	18,290	336,032	749,852	1,420,544
United States and Hawaii	1,401,599	10,589,620	10,408,823	9,311,336	9,647,517	11,792,247
Japan ... ..	2,005,194	255,524	...	...	...	1,635,317
Netherlands East Indies...	505,970	1,201,246	3,820	4,003	21,050	800,209
China and other Eastern Countries ... ..	2,180,310	277,870	370,590	165,170	110,238	1,064,926
Pacific Islands ... ..	375,540	1,148,828	1,311,555	1,439,150	1,628,654	1,331,886
Other Foreign Countries...	281,873	2,718,377	976,426	2,838,907	2,066,021	2,525,026
Total, Foreign ... ..	16,237,452	25,877,797	13,097,504	14,004,631	14,325,071	27,168,644
Country not stated ... ..	...	5,308,088	5,526,531	6,842,247	11,917,011	11,152,018
Total, Exports ... ..	37,686,991	55,556,813	54,258,522	54,079,117	60,827,442	76,390,324

\* See comments following Table 104.

In the imports of merchandise, products of the United Kingdom represented 41.3 per cent. of the total in 1938-39 and products of all British countries 59.4 per cent. The proportions were United Kingdom 35.9 per cent., total British 54.9 per cent. in 1944-45; and United Kingdom 34.7 per cent. and total British 54.7 per cent. in 1945-46.

The value of goods imported from the United States of America rose in proportion from 16 per cent. in 1938-39 to 46½ per cent. in 1943-44, but declined to 27 per cent. in 1945-46. Imports from continental Europe, 12 per cent. in 1938-39, dwindled to insignificant proportions early in the war period. Imports from other foreign countries declined from 12½ per cent. in 1938-39 to 2¾ per cent. in 1943-44, but increased to 10 per cent. in 1945-46.

In the export trade in merchandise, the proportion sent to British countries rose from 56.9 per cent. in 1938-39 to 70.4 per cent. in 1943-44, but was only 49.8 per cent. in 1945-46. The proportion despatched to the United Kingdom was 34.8 per cent. in 1938-39, 25.4 per cent. in 1943-44, and 20.4 per cent. in 1945-46. Exports to the Continent of Europe were 25.2 per cent. in 1938-39, were almost negligible in 1941-42 to 1943-44, and increased again to 10.5 per cent. in 1945-46. The United States share of merchandise exports increased from 4 per cent. in 1938-39 to 35.3 per cent. in 1941-42 but decreased in following years and was 15.4 per cent. in 1945-46.

The following statement shows the annual value in British currency of British and foreign imports, including bullion and specie, into New

South Wales in quinquennial periods from 1926-27 and in each year 1942-43 to 1945-46:—

TABLE 109.—Origin of Oversea Imports, N.S.W., 1926-27 to 1945-46.\*

Country of Origin.	Value of Oversea Imports, according to Country of Origin (British Currency).*							
	Annual Average—Five years ended June—				Year ended June—			
	1927 to 1931.	1932 to 1936.	1937 to 1941.	1942 to 1946.	1943.	1944.	1945.	1946.
United Kingdom ...	£000 21,705	£000 10,359	£000 18,523	£000 28,892	£000 31,598	£000 27,853	£000 35,657	£000 26,310
Other British Countries ...	7,566	5,098	11,186	18,119	18,321	22,158	19,686	15,967
Total British ...	29,271	15,457	29,709	47,011	49,919	50,011	55,343	42,277
Continent of Europe ...	6,802	3,137	3,932	293	172	157	162	713
United States of America...	14,210	4,436	7,839	30,020	33,078	47,164	37,796	20,451
Japan ...	2,075	1,722	1,951	32	4	...	...	2
Other Foreign Countries ...	3,570	2,061	3,933	4,679	2,146	2,616	6,346	6,785
Total Foreign ...	26,657	11,356	17,655	35,024	35,400	49,937	44,304	27,951
Origin not disclosed	...	...	...	1,123	...	88	...	5,528
Outside Packages and Containers ...	261	641	1,007	1,376	1,035	1,831	1,683	1,305
Total Imports ...	56,189	27,454	48,371	84,534	86,354	101,867	101,330	77,061

Proportion per cent. of Total Oversea Imports.

United Kingdom ...	38.8	38.6	39.1	36.0	37.0	27.8	35.8	37.5
Other British Countries ...	13.5	19.0	23.6	22.5	21.5	22.2	19.7	22.7
Total British ...	52.3	57.6	62.7	58.5	58.5	50.0	55.5	60.2
Continent of Europe ...	12.2	11.7	8.3	0.4	0.2	0.2	0.2	1.0
United States of America...	25.4	16.5	16.6	34.8	38.8	47.2	37.9	29.1
Japan ...	3.7	6.4	4.1	0.1	...	...	...	...
Other Foreign Countries...	6.4	7.8	8.3	6.2	2.5	2.6	6.4	9.7
Total Foreign ...	47.7	42.4	37.3	41.5	41.5	50.0	44.5	39.8
Grand Total...	100	100	100	100	100	100	100	100

\* See comments following Table 104.

During the period 1941-42 to 1945-46 the proportion of United Kingdom produce imported into New South Wales was about 36 per cent. of the total, and other British goods represented 23 per cent. The proportion of imports from United States of America averaged about 35 per cent. in the same period, but declined from the peak figure of 47 per cent. in 1943-44 to 29 per cent. in 1945-46.

The following comparison relates to the annual value of exports of merchandise and bullion and specie to British and foreign countries since 1926-27. The values are stated in Australian currency.

TABLE 110.—Destination of Oversea Exports from New South Wales.  
1926-27 to 1945-46.\*

Country of Destination.	Value of Oversea Exports (Australian Currency).*							
	Annual Average—Five Years ended June—				Year ended June—			
	1927 to 1931.	1932 to 1936.	1937 to 1941.	1942 to 1946.	1943.	1944.	1945.	1946.
United Kingdom ...	£000 12,983	£000 16,954	£000 18,222	£000 13,158	£000 12,293	£000 11,942	£000 15,293	£000 15,623
Other British Countries ...	5,364	5,027	9,368	20,013	23,345	21,207	19,296	22,457
Total British ...	18,347	21,981	27,590	33,171	35,638	33,149	34,589	38,080
Continent of Europe ...	14,967	9,068	8,462	1,964	18	336	852	8,019
United States of America ...	5,714	3,018	14,155	13,857	10,409	9,303	9,645	11,790
Japan ...	5,098	3,472	2,776	211	...	...	...	800
Other Foreign Countries ...	2,176	2,224	3,499	4,681	2,672	4,459	3,834	7,000
Total Foreign ...	27,955	19,782	28,892	20,713	13,099	14,098	14,331	27,609
Not stated ...	...	...	606	8,149	5,526	6,842	11,917	11,152
Total Exports ...	46,302	41,763	57,088	62,033	54,263	54,089	60,837	76,841

Proportion per cent. of Total Oversea Exports.

United Kingdom ...	28.0	40.6	32.3	23.5	25.2	25.3	25.2	23.8
Other British Countries ...	11.6	12.0	16.6	39.7	47.9	44.9	47.9	34.2
Total British ...	39.6	52.6	48.9	63.2	73.1	70.2	73.1	58.0
Continent of Europe ...	32.3	21.7	15.0	2.8	...	0.7	...	12.2
United States of America ...	12.3	7.3	25.0	25.0	21.4	19.7	21.4	17.9
Japan ...	11.0	13.1	4.9	0.3	...	...	...	1.2
Other Foreign Countries ...	4.8	5.3	6.2	8.1	5.5	9.4	5.5	10.7
Total Foreign ...	60.4	47.4	51.1	36.8	26.9	29.8	26.9	42.0
Grand Total ...	100	100	100	100	100	100	100	100

\* See comments following Table 104.

The value of all exports to the United Kingdom contracted sharply after 1939-40 but this was more than offset by increased exports to other British countries to which 39.7 per cent. of all exports were sent in the five years ended 30th June, 1946, compared with 16.6 per cent. in the preceding five years. In 1941-42 to 1944-45 exports to European countries and to Japan virtually ceased, but those to the United States of America increased greatly in the war years up to 1941-42, when 47.8 per cent. of all exports went to that country, and thereafter decreased again, and in 1945-46 the proportion (17.9 per cent.) was about the same as in the years preceding 1938-39.

## ARTICLES IMPORTED.

A classification of the overseas imports into New South Wales in certain years since 1938-39 is shown in the following table. The items are grouped in accordance with a statistical classification adopted by the Department of Trade and Customs, and values are expressed in British currency. Relatively minor changes in classification were brought into effect on 1st July, 1945. The figures given in the table conform to the new classification; hence the values shown for certain classes in the years 1938-39 to 1943-44 differ from those published in previous issues of this Year Book.

TABLE 111.—Classification of Oversea Imports into N.S.W.,  
1938-39 to 1945-46.\*

(Values expressed in British Currency.)

Classification.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Foodstuffs of Animal Origin ... ..	£000 833	£000 357	£000 515	£000 466	£000 836	£000 465
Foodstuffs of Vegetable Origin, Beverages (non-alcoholic) etc. ...	2,075	2,835	3,351	2,405	3,220	4,248
Spirituous and Alcoholic Liquors ...	481	226	111	70	263	211
Tobacco and Preparations thereof ...	1,280	469	1,161	2,927	2,004	3,005
Live Animals ... ..	113	25	3	12	46	129
Animal Substances not Foodstuffs ...	649	381	370	336	432	454
Vegetable Substances and Unmannu- factured Fibres... ..	1,164	2,088	2,172	2,458	3,005	3,178
Yarns and Manufactured Fibres ...	1,361	2,264	2,560	2,957	4,297	2,078
Textiles ... ..	5,355	8,586	8,075	11,932	13,140	9,748
Apparel ... ..	731	588	382	653	923	568
Oils, Fats, and Waxes ... ..	3,040	4,812	5,452	7,308	8,643	8,249
Paints and Varnishes ... ..	367	369	238	260	290	518
Stones and Minerals (including Ores and Concentrates) ... ..	427	726	875	708	727	531
Metals and Metal Manufactures (except Electrical Appliances and Machinery)	6,685	11,406	22,743	36,249	23,285	9,437
Dynamo Electrical Machinery and Appliances ... ..	2,582	1,349	2,163	2,259	3,076	2,505
Machines and Machinery (except Dynamo, Electric) ... ..	4,148	4,707	8,079	7,806	8,210	5,544
Rubber and Rubber Manufactures ...	726	1,194	860	1,488	656	1,194
Leather and Leather Manufactures ...	56	52	23	20	10	22
Wood and Wicker ... ..	970	410	298	402	703	928
Earthenware, China, Glass, etc. ...	850	795	412	382	573	852
Paper ... ..	2,001	1,515	718	1,794	2,208	2,717
Stationery and Paper Manufactures ...	833	672	492	697	913	999
Jewellery, Timepieces, and Fancy Goods	710	349	208	284	215	599
Optical, Surgical, and Scientific Instru- ments ... ..	1,045	1,134	842	954	1,062	1,278
Drugs, Chemicals, and Fertilisers ...	1,982	2,213	2,081	2,621	2,315	2,374
Miscellaneous ... ..	3,481	4,538	20,797	11,225	18,082	13,923
Total Imports of Merchandise ...	43,945	54,150	84,981	98,858	99,152	75,724
Bullion and Specie ... ..	2,403	1,911	1,374	3,009	2,178	1,337
Total Imports ... ..	46,348	56,061	86,355	101,867	101,330	77,061

\* See comments following Table 104.

Machinery, metals and metal manufactures form the most important class of imports and next in order is the group yarns, textiles and apparel. Other valuable groups are vegetable substances and unmanufactured fibres, tea, tobacco, paper and stationery, oils, fats and waxes, and drugs,



chemicals and fertilisers. Arms, ammunition and explosives, included in the miscellaneous class, account for the larger increase under that classification since 1938-39.

A number of the more important items of overseas imports are listed below:—

TABLE 112.—Overseas Imports, N.S.W.—Principal Items.\*  
(Values expressed in British Currency.)

Item.		1938-39.	1939-40.	1940-41.	1943-44.	1944-45.	1945-46.
Thousands omitted.							
Electrical Machinery and Appliances	£	2,582	2,461	2,082	2,259	3,076	2,505
Other Machinery	£	3,778	3,557	3,694	4,996	3,884	3,745
Hand Tools	£	314	356	321	401	437	364
Aircraft and Parts	£	226	2,035	2,004	21,053	15,851	3,030
Motor Chassis and Parts	£	2,584	1,964	858	5,324	3,150	2,596
Tractors and Parts	£	310	246	190	1,066	2,808	1,451
Iron and Steel—	{ cwt.	715	688	740	596	944	487
Plate and Sheet	£	918	977	1,270	1,006	1,519	909
Other	£	360	357	431	417	201	223
Rayon Piece Goods	£	1,044	1,464	1,185	2,100	3,024	2,834
Cotton Piece Goods	£	2,279	3,212	3,546	5,829	8,066	4,093
Cotton, Raw	{ lb.	5,137	10,319	16,864	10,882	13,383	12,032
	£	114	207	499	587	699	652
Floor Coverings	£	629	801	589	6	27	336
Bags and Sacks	£	645	1,399	1,268	1,552	2,966	791
Yarns	£	458	663	692	751	907	909
Fish, in tins	{ lb.	12,692	11,436	9,111	10,426	12,116	3,229
	£	452	421	338	388	615	201
Tea	{ lb.	25,646	24,574	26,394	23,313	24,307	27,500
	£	1,312	1,438	1,574	1,817	2,101	2,604
Whisky	{ gal.	375	578	323	40	169	143
	£	391	646	371	60	260	203
Tobacco, Cigars, etc.	{ lb.	15,098	21,325	2,496	21,854	14,913	20,413
	£	1,280	1,333	185	2,927	2,004	3,005
Rubber, Crude, Waste, etc.	{ cwt.	159	155	201	212	67	103
	£	564	731	1,037	1,433	552	981
Petroleum and Shale Oils	£	2,739	3,796	2,949	6,876	8,326	7,924
Linseed	{ cwt.	547	573	551	440	658	577
	£	252	442	404	624	893	841
Copra	{ cwt.	476	534	626	424	313	250
	£	173	210	174	415	271	261
Timber, undressed	{ sup. ft.	199,196	150,246	50,683	30,885	54,758	66,004
	£	772	775	372	311	583	774
Printing Paper	{ tons	87	102	63	33	56	59
	£	1,152	1,604	1,124	581	1,000	1,187
Books (printed)	£	444	446	311	425	617	651
Glass and Glassware	£	430	370	292	173	251	260
Cinematograph Films	£	460	479	417	357	404	454
Drugs, Chemicals and Fertilizers	£	1,982	2,371	2,075	2,621	2,315	2,374
Arms, Ammunition and Explosives	£	605	678	616	7,862	15,293	11,781

\* See comments following Table 104.

#### ARTICLES EXPORTED.

Raw materials form the great bulk of the overseas exports of Australian produce from New South Wales. In regard to such commodities as wool, wheat, etc., the quantity available for export depends mainly on local seasonal conditions, but war-time restrictions on shipping, etc., impeded the flow of exports, particularly of wool.

The aggregate value of the overseas exports of staple products, wool, hides and skins, meat, butter, wheat and flour amounted to £25,826,000, or 71 per cent. of the total value of exports of Australian merchandise from New South Wales in 1938-39, and to £36,222,000 or 70 per cent. of the total in 1939-40. Subsequently the value fluctuated and in 1942-43 the amount was £24,724,000 and the proportion, which had been declining year by year, was only 47.8 per cent. The value was £26,442,000 and the proportion 51 per cent. in 1943-44, and £40,420,000 or 55 per cent. in 1945-46.

The next table shows the quantity and value of the principal commodities exported from New South Wales during certain years since 1938-39:—

TABLE 113.—Oversea Exports, N.S.W.—Australian Produce—Principal Items. (Value in Australian Currency.)\*

Item.		1938-39.	1939-40.	1940-41.	1943-44.	1944-45.	1945-46.
Thousands omitted.							
Wool—Greasy ... ..	lb. £	317,755	338,326	214,352	141,361	152,269	261,745
	£	15,003	21,365	14,471	11,254	11,877	20,749
Scoured... ..	lb. £	22,600	26,863	17,103	18,724	19,270	21,800
	£	1,633	2,476	1,714	2,124	2,181	2,500
Tops, Noils, etc. ...	lb. £	5,738	5,549	6,257	6,521	5,287	4,934
	£	585	721	943	1,281	1,095	1,044
Total Wool (as in Grease.)	lb. £	370,200	408,600	265,000	196,000	205,500	319,700
	£	17,221	24,562	17,128	14,659	15,153	24,293
Hides and Skins—							
Cattle and Calf ... ..	No. £	1,251	484	523	98	77	92
	£	621	393	338	176	103	113
Rabbit and Hare ... ..	lb. £	1,662	3,710	4,445	5,120	5,247	7,619
	£	198	491	1,076	2,256	1,910	3,271
Sheep, with Wool ... ..	No. £	2,979	2,378	807	814	1,144	4,472
	£	583	631	216	306	269	912
Other Hides and Skins ...	£	175	145	264	359	446	550
Total Hides and Skins ... ..	£	1,577	1,660	1,894	3,097	2,728	4,846
Meat—							
Frozen Mutton and Lamb ...	lb. £	44,984	84,060	93,192	27,266	18,747	16,325
	£	1,105	1,834	2,342	727	516	455
Tinned Meats ... ..	lb. £	2,326	6,627	14,935	50,832	47,611	40,523
	£	78	281	707	2,587	2,747	2,387
Other Meat ... ..	£	531	1,059	783	2,097	1,768	1,860
Total, Meat ... ..	£	1,714	3,174	3,832	5,411	5,031	4,702
Leather and Manufactures ...	£	352	739	511	246	346	397
	cwt. £	169	296	189	186	110	39
Tallow ... ..	£	161	333	198	319	182	112
Butter ... ..	lb. £	23,966	31,982	19,564	9,875	6,625	13,068
	£	1,420	1,985	1,239	654	600	1,212
Eggs ... ..	£	206	195	524	162	199	503
Wheat ... ..	bush. £	15,030	13,106	9,722	420	194	2,807
	£	2,041	2,231	1,882	100	53	1,308
Flour ... ..	cwt. £	5,863	6,336	6,140	4,377	3,452	3,615
	£	1,853	2,447	3,002	2,551	2,144	3,969
Lead (pig) ... ..	cwt. £	1,278	1,831	1,250	1,561	2,011	700
	£	1,295	1,883	1,227	1,943	2,847	1,295
Iron and Steel ... ..	cwt. £	4,571	8,837	5,737	814	1,251	3,393
	£	2,017	7,685	3,304	598	846	2,664
Coal ... ..	tons £	382	264	330	158	189	75
	£	847	251	332	182	224	92
Timber (undressed) ... ..	super. ft. £	27,251	19,098	16,305	9,985	8,810	12,708
	£	382	306	270	230	210	301
Other Merchandise ... ..	£	5,734	7,123	12,786	21,690	27,648	27,446
Total Exports of Merchandise	£	36,320	51,654	48,129	51,842	58,211	73,530
Bullion and Specie ... ..	£	5,208	15,716	13,307	3	9	121
Total Exports of Australian Produce ... ..	£	41,528	67,370	61,436	51,845	58,220	73,651

\*See comments following Table 104.

Wool is the principal export commodity. Production was unusually heavy in the early war years, but much of the clip (purchased under war-time contract by the British Government) was stored in Australia pending shipment and the quantity exported from New South Wales in each of the years 1942-43 to 1944-45 was little more than half the exports in 1939-40, but exports increased again in 1945-46.

The reduction in quantity was partly offset in value by reason of higher prices under the Imperial contract.

The value of exports of meat rose in the period reviewed and the value of hides and skins trended upwards. Exports of butter have been on a reduced scale in the last six years and exports of wheat dwindled to exceptionally small proportions as the result of very poor Australian harvests in 1943-44 and 1944-45 and the export of a larger proportion as flour in order to conserve shipping space under war-time conditions.

The item "Other Merchandise" in Table 113 shows a remarkable increase from £5,734,000 or 15.8 per cent. of total merchandise exports in 1938-39, to £27,648,000 (47.5 per cent.) in 1944-45 and £27,446,000 (37.3 per cent.) in 1945-46. In large part the increase is accounted for by the expansion of exports of local secondary products, particularly soft goods, electrical goods, metal manufactures and machinery, rubber manufactures, chemicals, etc., and arms, ammunition and explosives. The growth in the export of commodities such as these, which was considerable in the decade preceding the war, accelerated during the war period, as illustrated by the following comparisons:—

Class or Sub-Class.	1928-29.	1938-39.	1944-45.	1945-46.
Value in Australian Currency of Exports Oversea from N.S.W.				
Spirituous and Alcoholic Liquors ...	£000 73	£000 • 66	£000 890	£000 £04
Tobacco, Cigarettes, etc. ...	208	92	669	593
Manufactured Fibres ...	29	33	111	258
Textiles ...	38	78	331	1,151
Apparel ...	56	62	295	1,834
Iron and Steel ...	24	2,017	846	2,664
Electrical Appliances and Equipment ...	37	225	227	369
Machinery (other than Electrical) ...	103	235	289	608
Metal Manufactures ...	439	684	1,482	2,137
Rubber Manufactures ...	38	60	288	344
Paper and Stationery ...	119	251	368	358
Drugs, Chemicals and Fertilizers... ..	388	499	1,305	1,924
Arms, Ammunition and Explosives ...	8	41	9,132	3,700
Total of Foregoing ...	1,560	4,343	16,233	16,744
Foregoing as proportion of Total Exports of Australian Produce...	per cent. 3.3	per cent. 12.0	per cent. 27.9	per cent. 22.8

Particulars are shown in the following statement regarding the destinations of the exports of the staple commodities in 1938-39 and each of the last four years:—

TABLE 114.—Destination of Principal Exports (N.S.W.)—Australian Produce.\*

Country.	Quantity.					Value (Australian Currency).				
	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.

WOOL.										
	Thousand lb. (as in the grease).					£000	£000	£000	£000	£000
United Kingdom ...	133,943	109,400	99,200	100,000	107,000	6,200	7,451	7,530	7,537	8,279
Canada ...	5,655	7,700	10,200	7,900	6,400	275	600	750	594	536
France ...	90,449	...	...	...	41,000	3,729	...	...	...	3,232
Belgium ...	55,949	...	...	...	35,300	2,225	...	...	...	2,581
Other European Countries	47,166	300	1,100	3,000	12,900	2,387	17	101	197	996
United States ...	10,053	110,300	76,000	84,200	103,400	596	7,962	5,286	5,028	7,535
Japan ...	28,659	...	...	...	...	1,448	...	...	...	...
Other Countries ...	7,326	3,800	8,900	10,400	13,700	361	272	992	897	1,134
Total ...	379,200	231,500	196,000	205,500	319,700	17,221	16,302	14,650	15,153	24,293

HIDES AND SKINS.										
United Kingdom ...	...	...	...	...	...	314	89	219	207	481
United States ...	...	...	...	...	...	403	1,209	2,534	2,263	3,516
Other Countries ...	...	...	...	...	...	860	47	344	258	849
Total ...	...	...	...	...	...	1,577	1,345	3,097	2,728	4,846

FROZEN LAMB AND MUTTON.										
	Thousand lb.					1,024	1,720	617	445	343
United Kingdom ...	41,497	63,880	22,147	15,596	12,014	81	16	57	46	96
Other Countries ...	3,437	815	2,445	1,984	3,687	...	4	53	25	13
Not stated ...	...	323	2,674	1,167	624	...	...	...	...	...
Total ...	44,984	65,018	27,266	18,747	10,325	1,105	1,746	727	516	455

BUTTER.										
	Thousand lb.					1,177	518	372	372	667
United Kingdom ...	19,941	8,585	6,138	4,170	7,479	159	107	87	8	179
India and the East ...	2,597	1,551	1,189	101	1,749	22	124	87	25	84
Pacific Islands ...	348	1,542	1,076	308	953	62	85	63	40	44
Other Countries ...	1,080	1,110	839	513	501	...	263	45	155	233
Not stated ...	...	3,149	633	1,524	2,386	...	...	...	...	...
Total ...	23,966	15,937	9,875	6,025	13,068	1,420	1,097	654	600	1,212

WHEAT.										
	Thousand Centals.					653	365	...	...	...
United Kingdom ...	2,716	1,075	...	...	...	222	...	...	...	...
Continental Europe ...	1,035	...	...	...	...	912	228	75	34	1,173
India and the East ...	4,117	653	185	83	1,412	31	...	...	...	...
Japan ...	133	...	...	...	204	218	115	...	...	169
New Zealand ...	998	314	...	...	68	5	4	27	19	56
Other ...	19	10	67	33	...	...	...	...	...	...
Total ...	9,018	2,052	252	116	1,684	2,041	712	100	53	1,393

FLOUR.										
	Thousand Centals.					1,853	1,042	2,551	2,144	3,969
United Kingdom ...	667	205	2,559	509	65	1,398	37	1,177	874	3,078
India and the East ...	4,416	622	170	1,465	2,738	118	231	37	348	529
Pacific Islands ...	333	434	490	452	495	141	251	364	391	85
Other ...	452	488	668	664	72	...	99	310	256	202
Not stated ...	...	104	490	362	245	...	...	...	...	...
Total ...	5,863	2,033	4,377	3,452	3,615	1,853	1,042	2,551	2,144	3,969

\* See comments following Table 104.

## RE-EXPORTS.

The value of merchandise re-exported oversea from New South Wales was £A1,366,956 in 1938-39 and £A2,860,279 in 1945-46. The principal items re-exported in 1938-39 and each of the last four years are shown below, values being expressed in Australian currency.

TABLE 115.—Re-exports Oversea from New South Wales.

Commodity.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
	£A.	£A.	£A.	£A.	£A.
Petroleum and Shale Oils ...	77,647	1,506,546	1,323,251	1,295,488	1,059,861
Machinery ... ..	194,005	55,181	29,721	37,215	102,108
Metals and Metal Manu- factures ... ..	143,985	129,202	94,364	54,541	129,035
Fish in Tins ... ..	23,265	139,839	144,622	171,173	555,338
Tea, Coffee and Cocoa ...	43,500	81,762	117,620	133,758	260,814
Tobacco, etc. ... ..	94,062	41,475	22,745	58,232	69,513
Whisky ... ..	27,202	20,323	9,604	11,993	72,815
Textiles ... ..	74,867	97,827	97,830	436,082	280,578
Films for Cinematographs, &c.	110,748	23,783	19,905	15,496	16,529
All other Items ... ..	577,675	386,529	377,553	402,216	313,688
Total, Re-exports ...	1,366,956	2,482,467	2,237,215	2,616,194	2,860,279

## OVERSEA EXPORTS—SHIPS' STORES.

The figures relating to oversea exports, as shown in the foregoing tables, do not include exports in the form of ships' stores. This is an important branch of the trade of the State, as will be seen from the following statement of the value of ships' stores exported from New South Wales in various years since 1921.

The unusually large totals in the late war years were due, for the greater part, to the provision of fuel oil for ships; the amounts under this item in successive years 1941-42 to 1945-46 were £1,313,993, £1,420,536, £2,608,557, £3,499,853 and £1,101,670.

TABLE 116.—Ships' Stores Exported Oversea from New South Wales.

Year ended 30th June.	Australian Produce.	Other Produce.	Total.
	£A.	£A.	£A.
1921	2,028,728	300,969	2,329,697
1931	787,881	95,942	883,823
1938	944,252	161,899	1,106,151
1939	895,899	166,898	1,062,797
1940	1,036,001	336,272	1,372,273
1941	1,120,474	747,376	1,867,850
1942	1,320,612	1,434,174	2,754,786
1943	972,989	1,560,305	2,533,294
1944	940,356	2,762,689	3,703,045
1945	1,690,157	3,630,623	5,320,780
1946	2,165,468	1,243,943	3,409,411

## CUSTOMS AND EXCISE TARIFFS.

The Australian Customs Tariff provides customs duties under three headings—the British Preferential, the Intermediate, and the General Tariff.

The British Preferential Tariff applies to goods which are wholly produced or wholly manufactured in the United Kingdom. It is also extended to cover goods of which the factory or works cost is represented by not less than 75 per cent. of United Kingdom, or United Kingdom and Australian labour and material; if the goods are scheduled as not commercially manufactured in Australia, the minimum percentage is 25 per cent., and in certain cases 50 per cent. It is an essential condition that the final processes of manufacture take place in the United Kingdom, and that the goods are consigned direct to Australia. The benefits of this tariff are extended to certain produce of British Crown colonies, protectorates, or territories under British mandate. By separate trade agreements the British Preferential Tariff has been applied to some products of Newfoundland, of the Dominions of Canada and New Zealand and of the territories of New Guinea and Papua, except where special duties are provided.

The Intermediate Tariff which was a feature of the Australian Customs Tariff until 14th October, 1932, was brought into operation again on 1st January, 1937, and applied to certain items in order to facilitate the implementation of trade agreements. The benefits of the Intermediate Tariff were extended in whole or in part by proclamation to a large number of countries with which Australia's balance of trade was generally favourable.

Trade agreements were completed in 1936 with Belgium, Czechoslovakia, France, and the Union of South Africa, and the benefits of the Intermediate Tariff were extended as from 1st January, 1937, to certain specified importations from these countries. The benefits of the Intermediate Tariff were also extended as from 30th December, 1938, to certain commodities imported from Switzerland under an agreement made with that country in 1938. Brazil became subject to intermediate tariff rates from 1st January, 1940, Greece from 17th June, 1940, and the United States of America from 18th February, 1943.

The General Tariff applies to all goods other than those to which the benefits of the British Preferential Tariff or Intermediate Tariff have been extended and those which are entitled to special import duties under the preferential tariffs or various Acts of Parliament.

*Primage Duties.*

A primage duty of  $2\frac{1}{2}$  per cent. ad valorem was imposed for revenue purposes from 10th July, 1930, upon almost all goods, in addition to duties collected in accordance with the tariff. The rate was increased to 4 per cent. on 6th November, 1930, and to 10 per cent. on most items on 11th July, 1931. Primage duties on certain goods under the British Preferential Tariff were reduced on 5th October, 1933.

Under the Customs Tariff (Primage Duties) Act, 1934, ad valorem primage duties at rates of 4 per cent., 5 per cent., or 10 per cent. are levied according to the origin and type of goods. Goods the produce or manufacture of Norfolk Island, New Zealand, Fiji, Papua, and the Territory of

New Guinea, and a number of specified goods for use by primary producers are exempt from primage duty. Many machines, tools of trade, and raw materials not manufactured or produced in Australia are also free of primage duty when subject to the British Preferential Tariff. Primage duties at the rates applicable to the British Preferential Tariff are imposed on Canadian goods admissible under the British Preferential Tariff and on proclaimed commodities from British non-self-governed colonies and protectorates. By proclamations which came into operation on 1st January, 1937, and after, all countries whose products were admissible under the Intermediate Customs Tariff were accorded a reduction of rate to 4 per cent. or 5 per cent., or exemption from primage duty in respect of specified tariff items.

#### *Special War Duty.*

An additional (war-time) customs duty, representing 10 per cent. of the sum of customs and primage duties, was payable on all goods except unmanufactured tobacco, petrol and similar petroleum and shale products from 3rd May, 1940, to 15th November, 1946.

#### *Exchange Adjustment.*

As a result of the world economic depression in 1929 and later years, the currencies of many countries were depreciated, and international exchange rates fluctuated considerably. Where the exchange rate was unfavourable to Australia, e.g., as between Australia and the United Kingdom, the effect was to give additional protection to Australian industries. The imposition of primage duties on imports in addition to the ordinary duties, and the fall in internal costs of production in Australia further increased the margin of protection.

After inquiry by the Tariff Board provision was made by the Customs Tariff (Exchange Adjustment) Act, 1933, and subsequent amendments, for adjustments in ordinary customs duties (other than primage duty and duty imposed by the Customs Tariff Industries Preservation Act) consequent upon depreciation of Australian currency in relation to the currencies of the countries to which the benefit of the British Preferential Tariff extend. These adjustments are as follows, viz.:—(a) When, at the date of exportation of the goods involved, Australian currency has depreciated to the extent of not less than 16 $\frac{2}{3}$  per cent., a deduction is to be made of one-fourth of the amount of the duty, or one-eighth of the value of the goods for duty, whichever is the less; or (b) when the depreciation is less than 16 $\frac{2}{3}$  per cent., but not less than 11 $\frac{1}{3}$  per cent., the deduction is to be one-eighth of the amount of the duty or one-sixteenth of the value of the goods for duty, whichever is the less. The extent of depreciation of Australian currency is determined according to the telegraphic transfer (buying) rate.

Subsequent to the enactment of the Customs Tariff (Exchange Adjustment) Act 1933, the Tariff Board adopted the principle of recommending protective rates of duty on the basis of reasonable and adequate protection necessary (a) under existing conditions of exchange, (b) if exchange, Australia on London, suddenly reverted to par, (c) to meet conditions of exchange between parity and the present premium rate of 25 per cent.

Tariff proposals introduced on 6th December, 1937 and later have imposed duties on certain articles in accordance with the recommendations of the Tariff Board as in (a) above with provision as in (c) for automatic variations of duties in consonance with fluctuations in the rate of exchange. With respect to items so affected deductions applicable under the Tariff (Exchange Adjustment) Act do not apply.

#### *Ottawa Agreement.*

As a result of the Imperial Economic Conference held in Ottawa during July and August, 1932, an agreement was made between the Governments of the Commonwealth and the United Kingdom for increased trade preference. The agreement was ratified by the United Kingdom and Australia Trade Agreement Act, 1932. The term of the agreement expired in August, 1937, after a currency of five years, but it continues in force, as neither party has denounced it. The terms of the agreement and subsequent negotiations for its review are described on page 316 of the 1938-39 issue of the Year Book. Trade relations of the members of the British Commonwealth of Nations were discussed in London preceding the meeting in Geneva in April, 1947, of the Preparatory Committee of the proposed International Trade Organisation.

#### *Reciprocal Tariffs and Trade Agreements.*

An historical review of the pre-war development of reciprocal trading arrangements between Australia and certain other countries was given in earlier editions of this Year Book. The trade agreements and reciprocal tariff arrangements current (other than that with the United Kingdom) are those with Canada, New Zealand, South Africa, Newfoundland, Southern Rhodesia, Switzerland, Belgium, France, Czechoslovakia, Greece and Brazil. Special arrangements govern Australian imports from Papua and New Guinea.

The specific arrangements entered into in each case are noted in some detail at pages 318 to 322 of the Official Year Book, 1938-39 and the major considerations only are given in the summary which follows.

*Canada.* Under the Customs Tariff (Canadian Preference) Acts fixed rates of duty accord mutual preferences between Australia and Canada on specific items, and other items are admitted at Intermediate tariff rates. Specified Australian products include butter, cheese, tallow, eggs, hops, rice, fresh and dried fruits, peanuts, sugar, fruit juices, brandy, wines, veneers, gelatine and eucalyptus oil. Products of Canada specified include fish, agricultural machinery, calcium carbide, cash registers, corsets, timber, certain rubber manufactures, paper, motor vehicles and certain motor vehicle parts (but not bodies), iron and steel tubes, typewriters and vacuum cleaners.

*New Zealand.* Mutual preferences in trade between Australia and New Zealand are given by specific rates of duty on scheduled items, the application of British preferential tariff rates to non-scheduled commodities and the exemption of New Zealand products from Australian prinnage duty. Amongst the specified Australian products are hay and chaff, dried and



preserved fruits, jams and jellies, soap, wine, eucalyptus oil, woollen textiles, certain footwear, roofing tiles, galvanised iron and certain metal manufactures and machinery. Important amongst the many New Zealand goods specified are fish, hay and chaff, onions and timber. Under the agreement Australia admits Western Samoan cocoa beans at a rate of duty no greater than that applied to cocoa beans from any non-self-governing British colony, Protectorate or Mandated Territory.

These trade arrangements are covered by the Customs Tariff (New Zealand Preference) Acts, 1933-34 and Acts of 1940, 1941 and 1942 validating certain alterations to the specified rates. As from 1st March, 1938, by modification of the agreement, New Zealand increased rates of duty on certain Australian manufactures for which six months' notice or mutual consent was required under the agreement, and on certain other items subject under the 1933 agreement to duty at the British Preferential tariff rates.

*South Africa.*—Under a new trade agreement which operated from 1st July, 1935, Australia and the Union of South Africa admit each other's products (in the case of Australia, those of the mandated Territory of South-West Africa also) on most-favoured-foreign-nation terms, a reciprocal tariff agreement between South Africa and Mozambique excepted.

*Newfoundland.*—Australia admits Newfoundland newsprint under British preferential tariff rates and Newfoundland accords Australia a tariff preference of one cent per lb. on butter and of 10 per cent. *ad valorem* on canned fruits under a trade agreement operative as from 14th December, 1939.

*Southern Rhodesia.*—The Customs Tariff (Southern Rhodesia Preference) Act, operative from 10th April, 1941, admits Southern Rhodesian unmanufactured tobacco at British preferential tariff rates less 9d. per lb. and raw asbestos and chrome ore at preferential rates. A wide range of Australian primary and manufactured products receive tariff concessions in Southern Rhodesia.

*Belgium, Czechoslovakia, France and Switzerland.*—The trade agreements with Belgium, Czechoslovakia and France, originally operative from 1st January, 1937, are again in force after being in suspense during the period of enemy occupation. That with Switzerland (commenced 30th December, 1938) also was affected by Switzerland's virtual isolation during the war. The agreements with each of these countries carry mutual assurances of most-favoured-foreign-nation treatment. That with France provides tariff concessions on wool, hides and skins, wheat, barley, meat and metals; that with Belgium deals primarily with wool, sheep, skins, hides, tallow, fresh apples and pears, barley, wheat and frozen meat; that with Czechoslovakia with wool, sheep skins, rabbit skins, pearl shell, lead and apples, and that with Switzerland with wool, sandalwood oil, apples and pears, raisins and currants, canned fruits, eucalyptus oil, starch, barley and timber.

Amongst items imported by Australia accorded specific concessional tariff rates or concessions in other forms are Belgian glass, French high-power insulators and certain types of Czechoslovakian steel. Under the

agreements Australia brought under intermediate tariff rates 53 sub-items from Belgium, 44 items from Czechoslovakia, 96 items or sub-items from France, and from Switzerland, cheese, certain classes of textiles (mainly Swiss specialties), watches and chronometers, and trade catalogues, price lists and other printed advertising matter addressed to hospitals, medical practitioners and dentists.

*Brazil*.—A trade agreement with Brazil came into operation on 1st January, 1940. It carries assurances of most-favoured-foreign-nation treatment of each country's products, except in regard to commodities given special preferences or privileges for reasons particular to Australia or Brazil.

*Greece*.—An agreement similar to that with Brazil was entered into with Greece to operate as from 17th June, 1940.

*Papua and New Guinea*.—Certain products of Papua and New Guinea imported direct from these territories are admitted duty free under the Customs Tariff (Papua and New Guinea Preference) Act, 1936. Of these the more important are cocoa beans, coffee, ginger, coconuts, sago, tapioca, kapok and sesame seeds, vanilla beans and certain spices and gums. British Preferential Tariff rates are charged upon other Papuan and New Guinea products not specifically scheduled under the Act.

#### *Industries Preservation Act.*

The Customs Tariff (Industries Preservation) Act, 1921-1936, provides that the Minister, after inquiry by the Tariff Board, may under certain conditions impose dumping duty or dumping freight duty on imports in order to protect Australian industry from the dumping of foreign goods.

Similarly a special exchange duty may be imposed on goods imported from a country whose currency has depreciated in relation to Australian currency, if the sale of these goods by reason of such depreciation is detrimental to Australian industry.

#### *Sales Tax.*

Since 1st August, 1930, certain goods imported into Australia as well as local secondary products have been subject to the Sales Tax and the tax on imports is collected by the customs authorities at ports of entry. Certain imports from Fiji, New Zealand, Papua, New Guinea and Norfolk Island are exempt. Particulars as to rates of sales tax, etc., are published in the chapter, Public Finance, of this volume.

#### CUSTOMS AND EXCISE REVENUE.

The following statement shows the net amount of customs and excise revenue (including Special War Duty) collected in New South Wales under each division of the tariff during 1938-39 and each of the last four years. The collections include receipts on account of goods which were

transferred for consumption in other States, but do not include duties on goods from other States consumed in New South Wales:—

TABLE 117.—Customs and Excise Revenue Collected in New South Wales.

Tariff Division.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
<b>Customs—</b>	£	£	£	£	£
Stimulants, Ale, Beer, etc. ...	694,264	386,369	271,689	254,202	306,567
Narcotics (Tobacco) ...	2,233,312	4,170,014	3,282,239	3,280,846	3,197,323
Sugar ...	5,450	182	67	6	23
Agricultural Products and					
Groceries ...	667,764	370,622	331,876	391,600	484,371
Apparel and Textiles ...	1,219,018	626,993	480,990	506,125	654,122
Metals and Machinery ...	1,118,322	407,111	443,721	546,133	649,713
Oils, Paints, and Varnishes ...	3,453,278	1,925,941	2,455,302	3,055,786	4,131,585
Earthenware, etc. ...	252,547	61,834	81,217	74,650	159,108
Drugs and Chemicals ...	167,554	136,452	86,533	109,760	109,205
Wood, Wicker, etc. ...	335,723	49,473	106,057	170,198	220,670
Jewellery and Fancy Goods ...	292,714	291,007	291,983	302,863	424,019
Hides, Leather and Rubber ...	230,767	126,680	127,157	101,000	98,141
Paper and Stationery ...	216,256	25,209	47,132	38,907	57,535
Vehicles ...	753,187	(—) 33,715	9,862	17,911	96,034
Musical Instruments ...	18,119	536	211	210	1,894
Miscellaneous ...	533,448	287,537	261,448	505,392	794,875
Primage Duty ...	1,788,802	995,745	1,027,149	966,884	1,464,705
Special War Duty ...	.....	472,118	383,597	363,154	549,267
Other Receipts ...	84,984	60,688	66,275	63,802	94,795
<b>Total Customs ...</b>	<b>£ 14,065,509</b>	<b>10,360,706</b>	<b>9,754,595</b>	<b>10,749,429</b>	<b>13,393,952</b>
<b>Excise—</b>					
Beer ...	2,850,644	7,425,262	8,281,821	8,201,615	8,063,175
Spirits ...	709,799	1,857,753	2,096,292	2,099,399	3,153,485
Tobacco ...	1,646,079	6,027,291	5,236,823	4,931,174	5,162,442
Cigars and Cigarettes ...	1,246,318	5,048,434	5,387,874	5,049,137	5,113,168
Licenses ...	3,687	4,189	4,888	4,960	4,855
Other Excise Duty ...	522,849	1,274,944	1,236,176	1,224,509	1,433,024
<b>Total, Excise ...</b>	<b>6,979,376</b>	<b>21,637,873</b>	<b>22,243,874</b>	<b>21,510,794</b>	<b>22,930,149</b>
<b>Total, Customs and Excise</b>	<b>£ 21,044,885</b>	<b>31,998,669</b>	<b>31,998,469</b>	<b>32,260,223</b>	<b>36,324,101</b>
<b>Per head of population ...</b>	<b>£ s. d.</b> <b>7 13 11</b>	<b>£ s. d.</b> <b>11 0 1</b>	<b>£ s. d.</b> <b>11 4 2</b>	<b>£ s. d.</b> <b>11 3 8</b>	<b>£ s. d.</b> <b>12 9 5</b>

### Excise Tariffs.

Excise duties are levied on beer, spirits, tobacco, cigars, cigarettes, cigarette tubes and papers, petroleum and shale products, playing cards, matches, wireless valves, saccharin, snuff, and certain wines.

## SHIPPING.

### CONTROL OF SHIPPING.

Prior to the inauguration of the Commonwealth in 1901, the shipping of New South Wales was regulated partly by an Imperial enactment, the Merchant Shipping Act, 1894, and partly by the laws of the Parliament of New South Wales. Under the Commonwealth Constitution the Federal Parliament is empowered to make laws with respect to trade and commerce with other countries and among the States, including navigation and shipping, and in relation to such matters as lighthouses, lightships, beacons and buoys, and quarantine.

Special legislation relating to navigation and shipping is contained in the Commonwealth Navigation Act, 1912-1942. It is drafted on the lines of the Merchant Shipping Act and of the Navigation Act of New South Wales and embodies the rules of the International Convention for Safety of Life at Sea and the International Load Line Convention.

The provisions of the Navigation Act apply to ships registered in Australia (excepting those engaged solely in the domestic trade of any one State) and other British ships whose first port of clearance and whose port of destination are within the Commonwealth. The High Court of Australia has decided that clauses relating to manning, accommodation, and licensing do not apply to vessels engaged in purely intra-state trade.

A ship other than an intra-state vessel may not engage in the coasting trade of Australia unless licensed to do so, and a license may not be granted to a ship in receipt of a foreign subsidy. Licensees, during the time their ships are so engaged, are obliged to pay to the seamen wages at current rates ruling in Australia, and, in the case of foreign vessels, to comply with the same conditions as to manning and accommodation of the crew as are imposed on Australian registered vessels. Power is reserved to the Marine Administration to grant permits, under certain conditions, to unlicensed British ships to engage in the coasting trade and to authorise unlicensed ships of any nationality to carry out specified services without being deemed to engage in the coasting trade.

The part of the Commonwealth Navigation Act which relates to pilotage has not been brought into operation, and this service is regulated under the State Navigation Act of 1901-1941.

Administrative control over the ports of New South Wales (other than Port Kembla) is vested in the Maritime Services Board of New South Wales, which is described on page 151. There is also an Advisory Committee to advise the Board in respect of Newcastle.

Matters relating to seaboard quarantine are administered by the Commonwealth, and the State Government aids in carrying out the law relating to animal and plant quarantine. Imported animals or plants may not be landed without a permit granted by a quarantine officer. The master,

owner, and agent of a vessel ordered into quarantine are severally responsible for the expenses, but the Commonwealth Government may undertake to bear the cost in respect of vessels trading exclusively between Australasian ports. Quarantine expenses, in the case of animals, plants and goods are defrayed by the importer or owner.

Vessels arriving from overseas ports are examined by a quarantine officer at the first port of call in Australia. If the vessel is less than fourteen days from the last overseas port of call (certain South Pacific Island ports excepted) it is inspected again at the next Australian port of call. The quarantine station of New South Wales is situated in Sydney Harbour, near the entrance to the port.

The liability of shipowners, charterers, etc., in regard to the transportation of goods is defined by the Sea-carriage Acts passed by the State and Commonwealth Parliaments. The State Act passed in 1921 applies to the intra-state trade, and the Commonwealth Act of 1924 applies to the interstate and the outward overseas trade.

#### *War-time Control of Shipping in Australia.*

The National Security (Shipping Control) Regulations, made in January, 1941, created a board charged with ensuring the best possible use of shipping to further the war effort. By the regulations Australian ships became subject to direction, requisition and governmental control. Practically the entire interstate fleet was requisitioned under authority given on 14th July, 1941. The requisitioned ships were restored to their owners on and after 18th August, 1947, as the then current voyages were completed.

National Security (Shipping Co-ordination) Regulations were made in June, 1944, superseding these regulations, and establishing the Australian Shipping Control Board which functioned in the control of ships, and their movements, and the Stevedoring Industry Commission. Separate committees were set up to deal with chartering of ships and the control of cargoes, but these committees were disbanded and their functions were taken over by the Shipping Control Board late in 1945. These with other regulations dealing with matters affecting shipping, brought all ships, ports and wharves, shipping practices (including insurance), ship movements and cargoes, employment on ships and in waterside vocations, and the docking and repair of ships closely under governmental control. The Director of Shipping was also the representative in Australia of the British Ministry of War Transport, and thus the war-time maritime policies of Australia and the United Kingdom were co-ordinated closely. Ship building in Australia also was brought under a single authority and was greatly expanded to serve war-time needs.

The National Security (Shipping Co-ordination) Regulations (with some modifications) have been continued in operation until 31st December, 1947, by the Defence (Transitional Provisions) Act, 1946, pending the enactment of legislation to effectuate the Government's plans in regard to post-war shipping and related activities. Part V of these regulations governing control of the stevedoring industry will be revoked automatically when the Stevedoring Industry Act, 1947, is brought into operation.

*Stevedoring Industry Commission.*

Under the Stevedoring Industry Act the powers, assets and obligations of the Stevedoring Industry Commission are to be transferred to a similarly named Commission of six members comprising a chairman, who must be a Judge of the Arbitration Court or a Commonwealth Conciliation Commissioner, one representative of Australian and one of oversea ship-owners, two representatives of the Waterside Workers' Federation of Australia, and, as a non-voting member, an officer of the Commonwealth.

Waterside Employment Committees, comprising a chairman appointed by the Commission and either one or two representatives of (a) employers and of (b) members of the Federation, may be appointed at any port. To them the Commission may delegate any of its administrative and disciplinary powers. Appeals from decisions of a committee may be made to the Commission.

In the main, the Commission will replace the Arbitration Court in regard to conciliation and arbitration in the stevedoring industry, but it may not alter standard hours or the basic wage for waterside workers or the principles upon which it is computed. The Commission, under the powers conferred upon it, is to conduct employment bureaux, is to provide and administer welfare services and amenities, and, in furthering the effort to de-casualise the stevedoring industry, must apply moneys collected under the Stevedoring Industry Charge Act, 1947 (at the rate of 4½d. for every man-hour of employment) in making payments of attendance money to men offering for work but not engaged.

The Commission is to maintain registers of employers and of waterside workers and may determine and vary the quota (*i.e.*, the number of workers needed) at each port. To ensure the necessary discipline in the industry it may cancel or suspend registration of either employers or waterside workers; the Act bans the employment of other than registered workers and employment of waterside workers by unregistered employers. Pending proclamation of the Act control of the industry remains with the Stevedoring Industry Commission constituted under and in accordance with the National Security Regulations.

## STATISTICS OF SHIPPING.

The figures of shipping in Tables 118 to 125 are exclusive of particulars concerning ships of war, cable-laying vessels, and yachts, which are not included in the official shipping records. The term tonnage, as used in this chapter means net tonnage, *i.e.*, the measure of a ship's carrying capacity.

Because vessels engaged exclusively in the transport of troops, war equipment and supplies were excluded also in the statistics for the war years, the figures for those years and for other periods may not be compared without taking the altered basis into account.

*Oversea and Interstate Shipping—Vessels Entered and Cleared.*

In compiling the records of oversea and interstate shipping, a vessel is treated as an entry once and as a clearance once for each voyage to and from New South Wales, being entered at the first port of call, and cleared at the port from which it departs. The repeated voyages of every vessel are included.

The following statement shows the aggregate number and tonnage of interstate and oversea vessels which arrived in and departed from ports of New South Wales in various years from 1920-21, with the average net tonnage per vessel. It affords evidence of the diversion of shipping from normal services during the war.

TABLE 118.—Shipping Entered and Cleared (N.S.W.), 1920-21 to 1945-46.\*

Year ended 30th June.	Entries.		Clearances.		Average Tonnage per Vessel.
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	
1921	3,019	7,123,331	3,023	7,122,209	2,358
1929	2,865	8,516,413	2,847	8,532,023	2,985
1931	2,547	7,938,164	2,568	8,008,827	3,118
1939	3,319	11,241,842	3,334	11,232,236	3,378
1943	1,783	4,461,578	1,863	4,789,604	2,537
1944	1,783	4,662,457	1,856	5,030,873	2,664
1945	1,800	5,078,645	1,796	5,138,538	2,841
1946	1,761	5,527,830	1,787	5,507,885	3,110

\* See comments on shipping statistics, page 144.

## DIRECTION OF SHIPPING TRADE.

The shipping records do not disclose the full extent of communication between New South Wales and other countries, as they relate only to terminal ports. They are exclusive of the trade with intermediate ports, and some of these are visited regularly by many vessels on both inward and outward journeys. The following statement of the tonnage entered from and cleared for interstate ports and overseas countries, grouped according to geographical position, indicates, as far as practicable, the growth or decline of shipping along the main trade routes between 1938-39 and 1945-46:—

TABLE 119.—Shipping Entered from and Cleared for Principal Countries, 1938-39 to 1945-46.\*

Country.	Entries.				Clearances.			
	1938-39.	1943-44.	1944-45.	1945-46.	1938-39.	1943-44.	1944-45.	1945-46.
Thousands of net tons.								
Australian States ...	6,205	2,535	2,391	2,439	6,302	2,709	2,730	2,659
New Zealand ...	861	182	146	335	845	131	141	160
U. Kingdom and Europe...	1,787	246	370	573	2,135	352	411	842
Africa ...	43	108	101	108	39	148	104	40
Asia and Pacific Islands ...	1,417	681	1,169	1,244	1,468	1,054	1,232	1,173
North and Central America	919	833	845	801	427	607	469	573
South America ...	10	78	53	21	17	30	40	40
Unspecified ...	...	...	4	6	...	...	12	15
Total ...	11,242	4,663	5,079	5,527	11,232	5,031	5,139	5,508

\* See comments on shipping statistics, page 144.

## INTERSTATE AND OVERSEA CARGOES.

A comparative statement of the interstate and oversea cargoes discharged and shipped in New South Wales in each year from 1936-37 to 1945-46 is shown below.

TABLE 120.—Cargoes Discharged and Shipped, 1936-37 to 1945-46.\*

Year ended 30th June.	Cargo Discharged.					Cargo Shipped.				
	Interstate.		Oversea.		Total.	Interstate.		Oversea.		Total.
	Tons Weight.	Tons Measurement.	Tons Weight.	Tons Measurement.		Tons Weight.	Tons Measurement.	Tons Weight.	Tons Measurement.	
000's omitted.										
1937 ...	tons. 2,459	tons. 620	tons. 1,069	tons. 1,061	tons. 5,218	tons. 2,733	tons. 674	tons. 1,520	tons. 339	tons. 5,266
1938 ...	2,823	687	1,336	1,160	6,006	2,968	711	1,500	343	5,522
1939 ...	3,167	676	1,179	1,112	6,134	2,736	672	1,679	359	5,446
1940 ...	3,368	657	1,277	1,052	6,354	2,605	734	1,926	337	5,602
1941 ...	2,950	722	1,164	665	5,501	3,686	694	1,543	494	6,417
1942 ...	2,926	699	1,357	749	5,731	3,694	654	1,090	559	5,997
1943 ...	2,590	561	1,240	753	5,144	3,596	515	995	706	5,812
1944 ...	2,777	638	1,384	931	5,730	3,360	475	1,073	985	5,893
1945 ...	2,817	668	1,620	1,075	6,180	3,298	420	972	710	5,400
1946 ...	2,154	442	1,623	1,001	5,220	2,831	316	930	632	4,709

Note.—One ton by measure = 40 cubic feet.

\* See comments on shipping statistics, page 144.

The total weight of cargoes discharged in ports of New South Wales in 1945-46 was 5,220,000 tons as compared with 5,218,000 tons in 1936-37, and 6,134,000 tons in 1938-39. The tonnage discharged was greatest, 6,354,000 tons, in 1939-1940. Cargo shipped amounted to 4,709,000 tons in 1945-46, as compared with 5,266,000 tons in 1936-37, and 5,446,000 tons in 1938-39. The tonnage shipped was greatest, 6,417,000 tons, in 1940-41.

In 1945-46 interstate cargo represented 49.7 per cent. of the total discharged, and 66.8 per cent. of the total shipped as compared with 62.6 per cent. and 62.5 per cent. respectively in 1938-39.

## NATIONALITY OF VESSELS.

The majority of the vessels engaged in the trade of New South Wales are under the British flag, the deep-sea trade with the Mother country and the British possessions being controlled chiefly by shipowners of the United Kingdom, and the interstate trade by Australian shipping companies. In the table below, British and foreign shipping are shown under distinctive headings.



TABLE 121.—Nationality of Shipping, 1920-21 to 1945-46\*

Year ended 30th June.	Net Tonnage Entered and Cleared.				Percentage.		
	Australian.	Other British.	Foreign.	Total.	Australian.	Other British.	Foreign.
1921 ...	4,739,555	6,739,914	2,768,071	14,245,540	33.3	47.3	19.4
1929 ...	4,656,402	9,247,088	3,144,946	17,048,436	27.3	54.3	18.4
1931 ...	4,639,497	7,930,626	3,376,868	15,946,991	29.1	49.7	21.2
1939 ...	7,997,764	10,508,326	3,967,988	22,474,078	35.6	46.8	17.6
1940 ...	6,725,989	8,089,686	3,853,622	18,669,297	36.1	43.3	20.6
1942 ...	4,607,700	4,731,063	3,615,900	12,954,663	35.6	36.5	27.9
1943 ...	3,292,545	2,568,438	3,390,199	9,251,182	35.6	27.8	36.6
1944 ...	2,931,001	2,610,031	4,152,298	9,693,330	30.3	26.9	42.8
1945 ...	2,789,273	3,390,331	4,037,579	10,217,183	27.3	33.2	39.5
1946 ...	2,859,129	5,154,868	3,021,718	11,035,715	25.9	46.7	27.4

\* See comments on shipping statistics, page 144.

Between 1930-31 and 1938-39, the total tonnage entered and cleared rose gradually from 15,946,991 to 22,474,078 tons, the highest recorded, and it declined to 11,035,715 tons in 1945-46. Australian shipping represented 25.9 per cent. of the total in 1945-46, other British shipping 46.7 per cent. and foreign 27.4 per cent., as compared with 35.6, 46.8, and 17.6 per cent., respectively, in 1938-39.

Particulars relating to the nationality of vessels engaged in trade with New South Wales in 1938-39 and the last three years are shown in greater detail in the following statement:—

TABLE 122.—Nationality of Shipping (N.S.W.), 1938-39 to 1945-46.\*

Nationality of Shipping.	Entries and Clearances.							
	1938-39.		1943-44.		1944-45.		1945-46.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
<b>British—</b>								
Australia	3,571	7,997,764	1,746	2,931,001	1,603	2,789,273	1,584	2,859,129
New Zealand ...	391	1,076,949	203	239,322	182	204,883	174	199,041
United Kingdom...	1,576	8,865,507	414	1,987,144	553	2,610,746	882	4,542,415
Other British	170	565,870	173	383,565	233	574,702	154	413,412
<b>Total</b> ...	<b>5,708</b>	<b>18,503,090</b>	<b>2,536</b>	<b>5,541,032</b>	<b>2,571</b>	<b>6,179,604</b>	<b>2,704</b>	<b>8,013,997</b>
<b>Foreign—</b>								
Denmark	19	71,615	...	...	...	...	3	13,452
France ...	125	195,449	22	20,084	22	20,208	54	61,012
Germany	110	504,219	...	...	...	...	...	...
Italy ...	41	231,435	...	...	...	...	...	...
Netherlands	144	671,807	40	187,923	17	78,781	28	101,338
Norway ...	135	543,761	205	553,023	181	435,546	134	399,385
Sweden ...	60	190,974	41	125,621	57	194,217	60	196,789
Japan ...	151	619,942	...	...	...	...	1	5,132
United States of America	97	711,024	450	2,198,437	432	2,333,618	293	1,622,226
<b>Other</b>								
Foreign	57	227,702	345	1,036,310	316	966,203	181	652,384
<b>Total</b> ...	<b>945</b>	<b>3,967,988</b>	<b>1,103</b>	<b>4,152,298</b>	<b>1,025</b>	<b>4,037,579</b>	<b>754</b>	<b>3,021,718</b>
<b>Grand Total</b> ...	<b>6,653</b>	<b>22,474,078</b>	<b>3,639</b>	<b>9,693,330</b>	<b>3,596</b>	<b>10,217,183</b>	<b>3,548</b>	<b>11,035,715</b>

\* See comments on shipping statistics, page 144.

In 1945-46 the tonnage owned in the United Kingdom represented 41.2 per cent. of the total. Foreign tonnage was owned chiefly in the United States, Norway and Sweden.

During 1945-46 entries and clearances of Australian tonnage in the interstate trade amounted to 2,518,848 tons, and voyages in overseas trade to 340,281 tons. Of the other British tonnage, including ships owned in the United Kingdom and New Zealand, 1,615,390 tons were entered from and cleared for interstate ports, and 1,202,327 tons plied between Australia and Great Britain. The tonnage belonging to other nations was employed chiefly in the foreign trade.

During 1945-46, interstate cargoes discharged at ports in New South Wales amounted to 2,596,073 tons, and oversea cargoes to 2,624,342 tons, and shipments to interstate ports represented 3,147,044 tons, and to oversea countries, 1,561,471 tons. Interstate trade is carried for the most part in Australian ships.

Particulars of oversea cargoes according to the nationality of the vessels which carried the trade in 1938-39 and the last two years are shown below.

TABLE 123.—Oversea Cargoes according to Nationality of Shipping (N.S.W.) 1938-39 to 1945-46.\*

Nationality of Shipping.	1938-39.		1944-45.		1945-46.	
	Discharged.	Shipped.	Discharged.	Shipped.	Discharged.	Shipped.
	tons.	tons.	tons.	tons.	tons.	tons.
Australia ... ..	91,839	103,222	56,839	146,498	106,361	203,772
New Zealand ... ..	41,187	320,762	51,903	131,763	40,706	93,111
United Kingdom ... ..	1,466,462	982,768	942,586	583,292	1,102,773	721,339
Other British ... ..	108,874	139,882	222,361	109,042	107,727	150,533
Total, British ... ..	1,708,362	1,501,634	1,273,639	970,595	1,357,567	1,169,255
Denmark ... ..	23,750	33,858	...	...	1,534	5,812
France ... ..	7,654	135,427	13,052	10,968	7,816	39,019
Germany ... ..	67,656	28,304	...	...	...	...
Italy ... ..	16,748	7,259	...	...	...	...
Japan ... ..	44,710	63,346	...	...	...	...
Netherlands ... ..	119,200	91,684	13,685	17,889	59,215	14,911
Norway ... ..	157,372	78,765	160,109	49,125	150,810	79,017
Sweden ... ..	41,110	23,866	207,911	72,319	117,349	45,229
United States of America ... ..	38,126	27,896	936,873	511,825	818,811	135,538
Other Foreign ... ..	66,798	45,486	89,718	49,685	111,240	72,660
Total, Foreign ... ..	533,133	535,981	1,421,348	711,811	1,266,775	392,216
Total, Oversea ... ..	2,291,495	2,037,615	2,694,987	1,682,406	2,624,342	1,561,471

Note.—Cargo recorded by measurement is converted to tons on basis of 40 cubic feet = 1 ton.

\* See comments on shipping statistics, page 144.

In 1945-46 British vessels carried 51.7 per cent. of the oversea cargo discharged at ports in New South Wales, and 74.9 per cent. of the cargo shipped abroad. In 1938-39, the proportions were 74.6 per cent. and 73.7 per cent. respectively.

## TRADE OF PRINCIPAL PORTS.

The interstate and oversea trade of New South Wales is confined practically to three centres, viz., Sydney, Newcastle and Port Kembla, and the distribution amongst the ports of the inward trade at intervals since 1921 is shown in the table below. On each voyage a vessel is counted as an entry only at the first port of call in New South Wales and intra-state trade is excluded, therefore the figures do not indicate the total tonnage entered at each port.

TABLE 124.—Principal Ports (N.S.W.), Shipping Entered,  
1920-21 to 1945-46.\*

Year ended 30th June.	Port Jackson (Sydney).		Port Hunter (Newcastle).		Port Kembla.		Other Ports.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
1921	1,869	4,776,182	1,082	2,255,040	42	85,514	26	6,595
1929	2,071	6,768,664	620	1,355,411	144	366,401	30	25,937
1939	2,140	8,560,135	886	2,071,733	260	583,197	33	26,777
1940	1,857	7,023,351	724	1,578,360	329	712,712	37	28,136
1941	1,675	5,764,356	759	1,462,675	257	541,350	15	9,663
1942	1,484	4,691,727	670	1,292,008	222	480,196	16	12,467
1943	1,017	2,875,257	580	1,167,938	174	408,746	12	9,637
1944	974	2,884,735	616	1,300,384	178	467,100	15	10,238
1945	1,072	3,530,352	628	1,069,558	187	469,516	13	9,219
1946	1,095	4,000,973	529	1,167,243	127	352,103	10	7,511

\* See comments on shipping statistics, page 144.

Vessels which discharge cargo at Sydney, then proceed to Newcastle for coal, are counted as entries at Sydney only, therefore the inward shipping of Newcastle is in excess of the tonnage stated in the table. The trade of Port Kembla has increased as a result of the establishment of important industries in the locality.

Particulars of the cargoes shipped and discharged at the principal ports in certain years between 1928-29 and 1945-46 are given in the following table. In recording cargoes certain commodities are assessed at their dead weight in tons, e.g., coal, ores, wool, wheat and other grains, while others such as butter, hides, skins and drapery are recorded in tons measurement, 40 cubic feet being taken as the equivalent of one ton.

The greater part of the oversea trade is handled in the port of Sydney and the shipping concerned with coal and iron and steel industries is conducted for the most part at Newcastle and Port Kembla. The cargoes handled at the latter ports are mainly dead weight cargoes but a large proportion of the cargoes shipped and discharged at Sydney is recorded in "tons measurement." On account of this difference in the nature of the products handled the data contained in the statement show fluctuations in the annual trade of the individual ports rather than a comparison of the trade of one port with that of another.

TABLE 125.—Principal Ports (N.S.W.), Cargoes Shipped and Discharged, 1928-29 to 1945-46.\*

Year ended 30th June.	Sydney.				Newcastle.		Port Kembla.	
	Interstate.		Oversea.		Interstate.	Oversea.	Interstate.	Oversea.
	Tons Weight.	Tons Measure.	Tons Weight.	Tons Measure.	Tons Weight.	Tons Weight.	Tons Weight.	Tons Weight.
					†	†		
Cargoes Discharged.								
1929 ...	245,850	616,929	791,750	1,315,064	711,637	123,598	203,455	54,405
1933 ...	405,844	364,098	650,369	567,158	624,015	79,798	141,162†	30,195
1939 ...	514,815	654,585	937,513	1,083,432	1,744,625	205,770	928,397	64,780
1940 ...	599,338	645,009	1,039,054	1,084,810	1,412,726	203,998	1,368,048	50,640
1941 ...	587,876	713,280	992,251	600,395	1,354,553	126,050	1,015,956	50,247
1942 ...	623,685	694,844	1,226,015	745,135	1,340,942	88,410	965,074	46,506
1943 ...	574,710	560,160	1,100,760	752,096	1,145,015	94,808	871,463	44,750
1944 ...	534,030	637,895	1,195,104	823,639	1,265,040	130,984	977,787	65,624
1945 ...	764,828	607,845	1,449,310	1,071,341	1,135,683	114,012	917,134	60,324
1946 ...	732,682	442,195	1,375,361	997,982	1,012,925	144,911	408,271	106,088
Cargoes Shipped.								
1929 ...	138,737	530,490	981,003	284,842	1,647,563	251,581	134,741	73,605
1933 ...	132,382	416,121	1,384,501	265,312	1,587,106	240,314	116,925	57,324
1939 ...	212,389	658,008	1,022,668	322,941	2,255,620	482,113	209,258	180,775
1940 ...	233,713	710,706	1,213,812	322,444	2,126,255	431,141	248,465	283,976
1941 ...	254,616	677,353	1,038,044	482,626	3,067,132	318,049	367,445	194,325
1942 ...	257,571	641,214	674,189	540,270	2,999,065	243,158	444,360	178,160
1943 ...	204,000	510,903	562,892	677,157	3,037,868	277,079	354,270	164,246
1944 ...	203,227	471,985	737,338	971,674	2,866,244	151,138	300,870	184,673
1945 ...	197,833	418,561	586,303	702,837	2,771,548	168,772	328,835	216,962
1946 ...	130,777	313,159	633,851	617,984	2,472,088	194,959	227,305	103,484

\* See comments on shipping statistics, page 144. † Includes a small number of tons measurement.

Interstate cargoes discharged and shipped at the port of Sydney in 1945-46 amounted to 1,618,813 tons as compared with 2,039,797 tons in 1938-39. Aggregate overseas cargoes in 1945-46 and 1938-39 were 3,625,178 tons and 3,366,554 tons respectively, representing an increase of 258,624 tons or of 7.7 per cent.

In Newcastle there has been a decline since 1938-39 in cargoes discharged, both interstate and oversea. The aggregate cargoes discharged in 1945-46, amounted to 1,157,836 tons as compared with 1,950,395 tons in 1938-39, a decrease of 792,559 tons or of 40.6 per cent. Interstate shipments amounted to 2,472,688 tons in 1945-46, an increase, as compared with 1938-39, of 217,068 tons or of 9.6 per cent. Overseas shipments decreased during the same period from 482,113 tons to 194,959 tons, a decrease of 287,154 tons or of 59.5 per cent.

Interstate cargoes shipped and discharged at Port Kembla aggregating 635,576 tons in 1945-46 (compared with 1,197,655 tons in 1938-39) were unusually light; in 1944-45 the interstate tonnage was 1,245,969. Overseas cargoes discharged increased during the same period. Shipments oversea fluctuated; the highest aggregate was 283,976 tons in 1939-40 and the total in 1944-45, 216,962 tons, exceeded the aggregate for 1938-39 by 36,187 tons or 20 per cent., but that of 1945-46 was only 103,484 tons and less than in any year since 1936-37.

## HARBOURS AND ANCHORAGES.

Along the coast of New South Wales there are numerous ports, estuaries, and roadsteads, which provide shelter to shipping and afford facilities for trade.

The shipping trade of the ports other than Sydney, Newcastle, and Port Kembla is relatively small.

*Sydney Harbour.*

Port Jackson (Sydney Harbour) is the principal port of New South Wales. It has a safe entrance and affords effective protection to shipping under all weather conditions. The total area of the harbour is 13,600 acres or about 21 square miles, of which approximately half carries a depth 30 feet or more at low water ordinary spring tide. The maximum depth in any part is 160 feet and the mean range of tides is about 3 feet 6½ inches. The foreshores, which have been somewhat reduced in length by reclamations, are irregular, extend over 152 miles, and afford facilities for extensive wharfage.

The control of the port is vested in the Maritime Services Board of New South Wales, a corporate body of five commissioners appointed by the Government of New South Wales. Two of the Commissioners are part-time members representing shipping and commercial interests. The Board's functions in respect of the port of Sydney include the provision of adequate wharfage, channels, lights and other port facilities, the control of shipping and pilotage, the imposition and collection of rates and charges on goods and vessels, the licensing of harbour craft and the general management and control of the port.

The wharves are situated in close proximity to the business centre of the city, about 4 or 5 miles from the Heads. Including private lighter and ferry berths, there are 78,031 feet of wharfage in Sydney Harbour. The principal wharves are lessed to the various shipping companies whose vessels engage regularly in the trade of the port, and other wharves are reserved for vessels which visit the port occasionally. Details relating to the number and length of the berths are shown below:—

TABLE 126.—Port of Sydney, Wharves and Jetties at 30th June, 1946.

Particulars.	Maritime Services Board of New South Wales.		Private Wharfage.		Total.	
	No. of Berths.	Length.	No. of Berths.	Length.	No. of Berths.	Length.
Ship berths—		feet.		feet.		feet.
Oversea ... ..	67	34,772	14	3,819	81	38,591
Interstate ... ..	24	9,355	3	516	27	9,871
Intrastate ... ..	39	11,223	8	1,202	47	12,425
Cross wharves adjoining ships' berths ... ..	39	4,693	...	...	39	4,693
Harbour trade berths ... ..	19	4,633	31	4,391	50	9,024
Ferry berths ... ..	25	3,427	...	...	25	3,427
Total ... ..	213	68,103	56	9,928	269	78,031

The wharves are situated on the southern shore of the port, and the northern is used mainly for residential sites.

Special facilities for the storage and handling of staple products such as wool, etc., are provided on the waterside, and modern plant has been installed for replenishing ships' bunkers with oil or coal.

Works have been constructed on a spit of land, known as Glebe Island, between Rozelle Bay and White Bay, to facilitate the shipment of wheat. Silos with a capacity of 7,500,000 bushels are available for the storage of wheat in bulk and the grain may be delivered into the holds of the vessels at the rate of 500 tons per hour. Plant is available also for the mechanical loading and storage of bagged wheat.

Ferry steamers on which traffic is carried across the harbour are certificated as to seaworthiness and licensed by the Maritime Services Board.

An arch bridge spanning the harbour from Dawes' Point to Milson's Point was opened on 19th March, 1932. It provides for pedestrian, vehicular, railway and tramway traffic. A description of the bridge is published in the chapter of this volume relating to Road and Bridges.

The number and tonnage of vessels which entered Sydney Harbour during the period 1936-37 to 1945-46, as recorded by the Maritime Services Board, are shown below. The figures differ from those in Table 124, because they include vessels engaged in the coastal trade of the State and vessels which do not report to the Customs authorities on return from a journey to Newcastle for bunker coal and, also, in that during the war years vessels engaged exclusively in the transport of troops, war equipment and supplies are included.

TABLE 127.—Port of Sydney, Shipping Entered, 1936-37 to 1945-46.\*

Year ended 30th June.	Coastal (State).		Oversea and Interstate.		Total Shipping.	
	Number.	Net Tonnage.	Number.	Net Tonnage.	Number.	Net Tonnage.
1937 ...	4,626	1,594,708	2,669	9,398,687	7,295	10,993,395
1938 ...	4,974	1,699,763	2,781	9,953,364	7,755	11,653,127
1939 ...	4,568	1,536,856	2,816	10,113,461	7,384	11,650,317
1940 ...	4,029	1,395,581	2,501	8,508,279	6,530	9,903,860
1941 ...	3,822	1,527,481	2,158	6,757,598	5,980	8,285,079
1942 ...	3,171	1,401,190	1,903	5,565,599	5,074	6,966,789
1943 ...	2,177	1,069,933	1,596	4,474,424	3,773	5,544,357
1944 ...	1,945	988,056	1,750	4,965,131	3,695	5,953,187
1945 ...	1,911	966,902	1,894	5,512,556	3,805	6,479,458
1946 ...	2,045	979,976	1,626	5,306,435	3,671	6,286,411

\* See comment preceding table.

Between 1936-37 and 1938-39 the aggregate tonnage which entered the port of Sydney expanded from 10,993,395 tons to 11,650,317 tons. In the next seven years it declined by 5,363,906 tons or 46 per cent.

As from 1st July, 1928, the accounts of the Harbour Trust (now the Maritime Services Board) were separated from the Consolidated Revenue Account, and a special fund was established for the receipts of the port

authority. The Board is required to contribute to the National Debt sinking fund established under the financial agreement between the Commonwealth and the States in the same proportion as its debt bears to the total loan debt of the State. The net profits are payable into a reserve fund to meet losses and to provide for the reduction of rates and charges.

The revenue and expenditure by the port authority at Sydney during each of the last ten years and the capital debt at the end of each year are shown in the following statement:—

TABLE 128.—Port of Sydney, Revenue and Expenditure,  
1936-37 to 1945-46.

Year ended 30th June.	Capital Debt.	Income.	Expenditure.				Surplus.
			Administra- tion and Maintenance Expenses.	Interest and Sinking Fund.	Exchange, etc.	Total Ex- penditure.	
	£	£	£	£	£	£	£
1937 ...	11,452,929	1,093,691	293,783	483,209	61,272	838,264	255,427
1938 ...	11,325,087	1,186,279	344,799	482,392	59,592	886,783	299,496
1939 ...	11,276,399	1,155,627	377,843	481,551	57,507	916,901	238,726
1940 ...	11,275,655	1,203,227	356,999	485,264	59,706	902,029	301,198
1941 ...	11,258,909	1,150,452	372,765	471,880	57,784	902,429	248,023
1942 ...	11,201,402	1,192,628	390,763	490,426	59,356	940,545	252,083
1943 ...	11,065,232	1,191,882	402,894	485,547	58,479	946,920	244,962
1944 ...	11,149,419	1,315,448	450,262	490,388	58,298	998,948	316,500
1945 ...	11,050,206	1,445,975	472,392	500,183	58,380	1,030,955	415,020
1946 ...	11,048,854	1,420,187	640,703	496,807	54,150	1,191,660	228,527

The total income during 1945-46 was £1,420,187. After the deduction of administration and maintenance expenses, £640,703, interest and sinking fund charges, £496,807, and exchange and loan management expenses, £54,150, there was a surplus on the year's transactions of £228,527; the smallest for ten years. The ratio of administration and maintenance charges to income was 45.1 per cent.

The principal sources of revenue were wharfage and transhipment rates, which amounted to £799,784, and rents from properties £314,090. The corresponding amounts for 1944-45 were £843,449 and £297,272.

#### *Newcastle Harbour.*

Newcastle Harbour (Port Hunter) is the second port of New South Wales and the third port of Australia in regard to the volume of its shipping trade. The harbour lies in the course of the Hunter River, and its limits are not defined, but an area of about 990 acres is enclosed by about 8 miles of coastline, extending on the western side as far as Port Waratah, omitting Throsby Creek, and on the eastern side to a point due east of the southern end of Moscheto Island. The area used by shipping is about 570 acres, excluding the entrance to the harbour and the inner basin, which together cover an area of 162 acres. There are coal-loading wharves at Hexham, about ten miles from the sea.

The harbour is landlocked sufficiently to render it safe for vessels in all kinds of weather, and breakwaters have been erected to improve the entrance and to prevent the ingress of sand from the ocean beaches. The width at the entrance is 1,200 feet, and the navigable channel with a depth of 25 feet 6 inches is 350 feet wide. Newcastle is primarily a coal-loading

port, and the proximity of the coalfields has led to the establishment of important industries, including iron and steel works, in the district. Facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber. A terminal elevator for the export of bulk wheat has been erected, and 535 feet of wharfage has been provided for wheat loading purposes.

At 30th June, 1946, wharfage accommodation was 19,756 feet including wharves controlled by the Maritime Services Board, 6,211 feet; Railways Department, 7,719 feet; Public Works Department, 200 feet; private companies, 2,200 feet, and 3,426 feet of tie-up berths and ferry and depot wharves. The general cargo wharves are connected with the main railway system, and the railway extends along the coal wharves. There are eight sets of mooring dolphins and jetties for vessels awaiting cargo, and 102 dolphins for tie-up purposes.

Newcastle Harbour is administered by the Maritime Services Board and an advisory committee consisting of five members appointed by the Governor. The chairman of the committee is nominated by the Board and the other members are representative of interests concerned with the administration of the port.

The number and tonnage of vessels which entered Newcastle Harbour during the period 1938-39 to 1945-46 as recorded by the Maritime Services Board are shown below:—

TABLE 129.—Port of Newcastle, Shipping Entered, 1938-39 to 1945-46.\*

Year ended 30th June.	Coastal (State).		Overseas and Interstate.		Total.	
	Number of Vessels.	Net Tonnage.	Number of Vessels.	Net Tonnage.	Number of Vessels.	Net Tonnage.
1939 ...	2,440	1,054,150	1,833	4,045,331	4,273	5,099,481
1940 ...	2,199	996,713	1,630	3,363,217	3,829	4,359,930
1941 ...	2,328	1,112,503	1,544	2,828,903	3,872	3,941,406
1942 ...	2,061	1,208,065	1,321	2,897,792	3,382	4,105,857
1943 ...	1,549	840,991	1,126	2,315,299	2,675	3,156,290
1944 ...	1,403	799,749	1,181	2,511,754	2,584	3,311,503
1945 ...	1,256	709,325	1,052	2,303,573	2,308	3,012,898
1946 ...	1,339	716,128	968	2,240,991	2,307	2,957,119

\* See comment preceding Table 127.

### *Port Kembla.*

Port Kembla is situated about forty miles south of Sydney and is controlled by the New South Wales Department of Public Works. The harbour, which is protected by constructed breakwaters, has an area of 330 acres, with depths of water ranging from 20 to 50 feet, and its well-equipped wharves accommodate large ocean-going vessels.

It is the port of the southern coalfields and for the expanding industrial area in and about Wollongong. From the port large quantities of coal, coke, iron and steel, and lead and zinc concentrates are shipped, and iron ore, pig iron, etc., and phosphate rock predominate in the tonnages discharged. Totals of cargoes shipped and discharged at the port are given in Table 125. In respect of tonnage of shipping entered, Port Kembla ranks seventh in the ports of Australia.



The number and tonnage of vessels which entered Port Kembla during 1938-39 and each of the last five years, as recorded by the Maritime Services Board, are shown below:—

TABLE 130.—Port Kembla, Shipping Entered, 1938-39 to 1945-46.\*

Year ended 30th June.	Coastal (State).		Oversea and Interstate.		Total.	
	Number of Vessels.	Net Tonnage.	Number of Vessels.	Net Tonnage.	Number of Vessels.	Net Tonnage.
1939 ...	241	59,961	609	1,165,297	850	1,225,258
1942 ...	188	62,415	428	859,734	616	922,149
1943 ...	145	56,758	331	721,233	476	777,991
1944 ...	151	55,895	317	791,392	468	847,287
1945 ...	103	39,433	344	861,377	447	900,810
1946 ...	63	22,590	236	582,943	299	605,533

\* See comment preceding Table 127.

#### RIVER TRAFFIC.

New South Wales has few inland waterways, and although there is some river traffic its extent is not recorded. The coastal rivers, especially in the northern districts, are navigable for some distance by sea-going vessels and trade is carried further inland by means of small steamers and launches.

The use of the inland rivers for navigation depends mainly on seasonal conditions. Traffic on the Darling is intermittent. At certain times, in seasons when the rainfall is sufficient to maintain a fair volume of water, barges carry wool and other products a considerable distance.

Under an agreement between the Governments of the Commonwealth, New South Wales, Victoria, and South Australia, a comprehensive scheme of control works in the Murray River system was designed to provide for navigation by vessels drawing 5 feet of water except in unusual drought.

During the year ended 30th June, 1946, seventy-four steamers and 55 barges and other vessels passed through Lock No. 10 at Wentworth carrying 2,271 passengers and 1,048 tons of cargo. Through Lock No. 11 at Mildura there passed 114 steamers and 13 barges, etc., with 8,873 passengers and 672 tons of cargo.

At 30th June, 1946, the works completed on the Murray River were the Hume Reservoir (capacity  $1\frac{1}{2}$  million acre-feet), Yarrawonga Weir, Lake Victoria Storage, thirteen locks and weirs, and barrages across the five channels at the mouth of the Murray in South Australia. These works permit permanent navigation from the mouth to 40 miles above Mildura, a distance of approximately 600 miles. On the Murrumbidgee River, weirs have been constructed at Redbank and Maude.

The net expenditure for the construction of reservoirs, locks and other works at 30th June, 1946, amounted to £11,890,381, of which the New South Wales Constructing Authority expended £4,005,009. One-fourth of the total net cost, equal to £2,990,995, was contributed by the Government of New South Wales.

## HARBOUR FERRY SERVICES.

Ferry services have been established by private companies to transport passengers, etc., in the ports of Sydney and Newcastle and the Hawkesbury and Richmond Rivers. These ferries are distinct from those to which reference is made in the chapter entitled Roads and Bridges, which are maintained by the central Government or by municipalities or shires for the transport of traffic across rivers where bridges have not been erected.

The following statement shows particulars of the passenger ferry services operated in Sydney and Newcastle in 1938-39 and the last four years:—

TABLE 131.—Passenger Ferry Services, Sydney and Newcastle.

Year ended 30th June.	Number of Vessels.	Passenger Accommoda- tion.	Passenger Journeys.	Gross Revenue.
			' 000	£
1939 ... ..	54	38,971	27,864	418,500
1943 ... ..	51	29,487	33,387	506,255
1944 ... ..	45	28,809	34,588	540,513
1945 ... ..	47	29,369	36,673	533,853
1946 ... ..	46	28,551	35,737	518,867

## RATES OF FREIGHT.

Freight charges represent an important factor in the cost of marketing in overseas countries the products of the industries of New South Wales. Generally the rates charged by British lines of steamships are determined by organisations of shipowners.

The following statement shows the rates, expressed in sterling, for the carriage of various commodities by sea from New South Wales to United Kingdom and Europe since 1939:—

TABLE 132.—Rates of Freight, New South Wales to United Kingdom and Europe, 1939 to 1946.

Expressed in Sterling.\*

At 30th June.	Butter.	Frozen Mutton.	Wheat Flour.	Calf Hides.	Greasy Wool.	Lead.	Leather.
	per 56 lb. s. d.	per lb. d.	per ton. s. d.	per lb. d.	per lb. d.	per ton. s. d.	per ton. s. d.
1939 ... ..	3 8·4	0·93	33 9	0·5	0·94	27 6	137 9
1940 ... ..	5 0	1·31	67 0	0·75	1·5	49 0	206 9
1941 to 1944	6 6·2	1·72	145 6	1·01	1·93	81 0	269 5
1945 ... ..	6 6·2	1·72	130 0	1·01	1·93	81 0	269 5
1946 ... ..	6 6·2	1·72	125 0	1·01	1·93	81 0	269 5

\* Equivalent rates in Australian currency are obtained by adding 25½ per cent. to all rates other than for refrigerated cargo in 1939, the addition for which is 13 per cent.

## PORT CHARGES.

The port charges payable in respect of shipping and ships' cargoes in New South Wales are imposed by the Commonwealth Government in terms of the Lighthouses Act and the Federal Navigation Act, and by the State authorities under the Navigation Act of New South Wales, the Harbour and Tonnage Rates Act, and the Sydney Harbour Trust Act. Since 1st February, 1936, the State enactments have been administered by the Maritime Services Board. In the case of Port Kembla, the Department of Public Works acts as agent for the board. Only a brief reference to the rates collected by each authority is made in this volume.

The gross collections by the State during recent years are shown below in comparison with those during the years 1920-21 and 1930-31:—

TABLE 133.—Port Charges (N.S.W.), 1920-21 to 1945-46.\*

Charges.	Year ended 30th June.						
	1921.	1931.	1939.	1943.	1944.	1945.	1946.
	£	£	£	£	£	£	£
Pilotage ... ..	74,733	58,221	74,606	49,014	56,271	60,774	61,151
Harbour Removal Dues ...	10,647	3,786	3,678	7,304	8,004	9,565	9,785
Harbour and Light Rates ...	49,551	46,015	50,381	25,408	24,111	29,505	48,176
Navigation Department Fees, etc. ... ..	10,839	1,170	6,146	6,827	9,966	7,825	7,996
Harbour and Tonnage Rates (Outports) ... ..	72,865	116,690	237,378	193,653	196,342	189,404	195,716
Maritime Services Board—							
Wharfrage and Tonnage Rates ... ..	475,230	499,736	811,681	764,750	864,391	1,010,474	970,500
Rents of Wharves and Jetties ... ..	188,473	192,649	166,215	165,786	183,659	184,628	198,654
Rents of other Premises ...	71,666	102,851	114,165	109,966	113,054	112,644	115,437
Miscellaneous ... ..	61,629	44,841	63,566	151,380	154,344	138,229	135,597
Total ... ..	£ 1,015,633	1,065,950	1,527,816	1,474,088	1,610,142	1,743,048	1,743,012

\* Includes shipping charges levied at Port Kembla.

*Charges levied on Ships.*

The principal charges imposed under Federal legislation are light dues and fees for the survey of ships, the adjustment of compasses, etc.

The Commonwealth light dues must be paid in respect of every ship entering a port in Australia (except ships exempted under the National Security Regulations). The rate, payable quarterly, is 6d. per ton (net), and payment at one port covers all Australian ports which the vessel may enter during the ensuing period of three months. Vessels calling at only one port in Australia *en route* to an overseas destination are charged at the rate of 5d. per ton (net).

The light dues collected in Australia by the Commonwealth Government during the year ended 30th June, 1946, amounted to £233,918, and receipts under the Federal Navigation Act to £16,727.

Sea-going vessels must be surveyed at least once in every twelve months. The fees for a twelve-months' certificate in respect of steamers, motor ships, and sailing ships with auxiliary engines, range from £4 where the gross registered tonnage does not exceed 100 tons; to £13 10s. if the gross tonnage is between 2,100 and 2,400 tons; and a charge is made for each additional 300 tons at the rate of 30s. for passenger ships and £1 for

cargo ships. The survey fees for dry docking certificates range from £1 to £4, and double rates are charged for vessels without certificates of survey. Additional charges are made for the survey of grain cargoes. The fees for the adjustment of a ship's compasses range from £2 2s. to £7 7s.

The certification of ships trading exclusively within the limits of the State of New South Wales is a function of the Maritime Services Board of New South Wales. The fees payable for surveys in respect of a twelve months' certificate range from £2 to £8 where the tonnage does not exceed 600 tons, with £2 for each additional 300 tons up to a maximum of £20.

Pilotage rates are charged by the Maritime Services Board of New South Wales in respect of ships entering or clearing a port in the State where there is a pilotage establishment. Vessels engaged in the whaling trade and vessels in the charge of a master possessing a pilotage certificate are exempt unless a pilot is actually employed. The rate is 2½d. per ton (net) on arrival and on departure; the maximum charge is £25 and the minimum is £3 at Sydney or Newcastle, and £1 10s. at other ports. The rate of 1½d. per ton is charged on ships in ballast or resorting to port for docking, repairs, stress of weather, etc., or for pleasure.

The harbour and light rate imposed by the State Government is payable half-yearly at the rate of 4d. per ton (net).

The rate for harbour removal varies from £1 to £4 10s. according to the size of the vessel; half rates are charged after the third removal.

Except at certain wharves, tonnage rates are payable in respect of vessels of 240 tons and over while berthed at a wharf, the charge being  $\frac{3}{16}$  d. per ton (gross) for each period of six hours. Vessels under 240 tons are liable for berthing charges; the daily rate in Sydney Harbour ranges from 2s. 6d. to 10s. Berthing charges in other ports are calculated at the rate of 2s. 6d. for each period of six hours. Where wharves are leased to shipping companies in the port of Sydney the tonnage rates and berthing charges in respect of their vessels are not charged as they accrue, but are commuted in the rent.

An annual license fee of £5 is charged for moorings owned and used by shipping companies in Sydney Harbour; and from 2s. 6d. to 10s. for those used in connection with docking premises or for small vessels. Mooring buoys owned by the Maritime Services Board are available at a charge of £1 10s. for the first twenty-four hours and thereafter 7s. 6d. per period of six hours or part thereof. In other ports vessels are allowed to occupy Government mooring buoys for a period of two clear days free of charge; thereafter buoyage rates ranging from £1 to £3 per day are imposed.

Tugs, ferry boats, hulks, and launches plying for hire in Sydney Harbour must obtain a license, for which the charge is £1 per annum. For water-boats supplying water to shipping in the port the annual license fee is £5; for lighters, 1s. per ton; and for watermen 5s. In other ports the annual license fees for ballast lighters and for watermen are £1 and 10s. respectively. The charge for water supplied to a vessel by the Maritime Services Board at unleased wharves in Sydney Harbour is 2s. per 1,000 gallons if the water is taken through hoses supplied by the Board; in other cases the rate is 1s. 6d.

*Harbour and Wharfage Rates.*

In addition to the foregoing charges levied on vessels and payable by their owners, harbour or wharfage rates payable by the owners of the goods are imposed on the cargoes landed or shipped in the ports. Goods transhipped are subject to transshipment rates and not to inward or outward wharfage or harbour rates. Passengers' luggage is exempt.

In Sydney Harbour, the inward rate is 4s. per ton assessed by weight or by measurement (40 cubic feet)—at the option of the Board; the outward rate is 1s. 6d. and the transshipment rate is 6d. But there are numbers of special rates for important commodities and there is a deduction of 20 per cent. in the charges on goods shipped for conveyance beyond the Commonwealth.

The outward rate for coal is 6d. per ton; wheat and flour 9d. per ton and wool 9d. per bale.

In ports other than Sydney there is a schedule of inward rates for coastwise and interstate goods, and a separate schedule for oversea goods. The inward general rate is 2s. per ton or 40 cubic feet for coastwise and interstate goods arriving at these ports and 4s. for oversea goods, and the outward rate on coastwise, interstate, and oversea goods is 1s. per ton or 40 cubic feet, unless otherwise specified. The charges on goods shipped to a destination beyond the Commonwealth are subject to a reduction of 20 per cent.

*Storage Charges.*

In order to avoid congestion on the wharves, storage and shed charges are imposed on goods placed on a wharf and not removed within a specified period.

Goods arriving at Sydney from any place beyond the Commonwealth and left on an unleased wharf after final discharge of the vessel for a longer period than six days are charged at the rate per ton per day of 4d. for the first week, 5d. for the second week, 6d. for the third week, and 7d. thereafter. The same rates are charged on goods discharged from interstate and intrastate vessels if left on any unleased wharf for a period exceeding three days. Goods left on an unleased wharf for more than two days after having been received for shipment are charged at the rate of 1d. per ton per day. These charges apply to the Port of Sydney only and are payable by the owner of the goods.

At a wharf at Rozelle Bay assigned for the purpose there is free storage of timber for the first forty-eight hours after commencement of discharge, after which the charge is 1d. per ton per day for the next four days and, thereafter, 3d. per ton per day; no storage is charged for Sundays and public holidays.

At ports other than Sydney storage charges do not accrue on goods until forty-eight hours after the completion of the vessel's discharge. The general charge per ton per day is 2d. for the first week; 3d. for the second week; 4d. for the third week; and 6d. for the fourth and subsequent weeks. At Newcastle the charge on wool and wheat is 1d. per ton per day; the charge on timber is 1d. per ton per day for the first four days (after the free period), and thereafter 2d. per day.

## SHIPPING REGISTERS.

Shipping in New South Wales is registered in accordance with the Merchant Shipping Act of the Imperial Parliament, under sections which apply to the United Kingdom and to all British dominions. The Act prescribes that all British vessels engaged in trade must be registered, except those under 15 tons burthen employed in the coasting trade of the part of the British Empire in which the owners reside. Ships not legally registered are not entitled to recognition as British ships and are not permitted to proceed to sea. Although the registration of vessels under 15 tons is not compulsory, many small vessels are registered at the request of the owners, as registration facilitates the transaction of business for the purpose of sale or mortgage. The flag for merchant ships registered in Australia and for ships owned in Australia is the red ensign usually flown by British merchant vessels, defaced with a white seven-pointed star indicating the six federated States of Australia and the territories of the Commonwealth, and the five smaller white stars representing the Southern Cross.

In New South Wales shipping registers are kept at the ports of Sydney and Newcastle. The following statement shows particulars regarding the shipping on the registers as at 30th June, in various years since 1929:—

TABLE 134.—Shipping on Register (N.S.W.) 1929 to 1946.

Type of Vessel and Tonnage Class.	Vessels on Register at 30th June.									
	Number of Vessels.					Net Tonnage.				
	1929.	1939.	1944.	1945.	1946.	1929.	1939.	1944.	1945.	1946.
<b>Steam—</b>										
Tons (net).										
to 49	240	185	172	173	172	5,365	3,805	3,591	3,595	3,587
50– 499	197	137	103	100	100	30,581	22,202	18,151	17,815	17,480
500– 999	18	17	16	15	15	12,424	12,160	11,273	10,591	10,644
1,000–1,999	8	8	5	6	7	12,910	12,050	7,680	9,325	10,486
2,000 & over	7	5	5	5	6	19,014	12,780	13,729	13,729	16,572
Total, Steam...	470	352	301	299	300	80,294	62,997	54,424	55,055	58,769
<b>Motor—</b>										
to 49	242	296	273	269	287	2,506	3,568	3,206	3,107	3,459
50– 499	2	9	10	10	15	355	1,365	1,632	1,632	3,414
500– 999	1	3	2	2	2	516	1,674	1,158	1,158	1,158
1,000–1,999	...	2	2	2	2	...	2,996	2,996	2,996	2,996
2,000 & over	...	2	2	2	2	...	6,068	9,511	9,511	9,511
Total, Motor ...	245	312	289	285	308	3,377	15,671	18,503	18,404	20,538
<b>Sailing—</b>										
to 49	203	184	159	154	157	2,777	2,045	2,156	2,087	2,156
50– 499	70	61	61	61	65	10,952	9,176	9,036	9,036	7,198
500– 999	8	3	3	3	3	6,413	2,537	2,537	2,537	2,245
1,000–1,999	3	3	3	3	2	3,727	3,727	3,727	3,727	2,584
Total, Sailing...	284	251	226	221	217	23,869	17,485	17,456	17,387	14,183
<b>All Vessels—</b>										
to 49	685	665	604	596	616	10,648	9,418	8,953	8,789	9,202
50– 499	269	207	174	171	170	41,888	32,743	28,819	28,483	28,092
500– 999	27	23	21	20	20	19,353	16,371	14,968	14,286	14,047
1,000–1,999	11	13	10	11	11	16,637	18,773	14,403	16,048	16,066
2,000 & over	7	7	7	7	8	19,014	18,848	23,240	23,240	26,083
Total, All Vessels	999	915	816	806	825	107,540	90,153	90,383	90,846	93,490

Twenty-five vessels with an aggregate tonnage of 1,427 tons (net) were sold during 1945-46. The sales were to British subjects and the transactions did not necessarily involve removal from the registers.

## SHIPBUILDING AND REPAIRING.

Facilities for building, fitting and repairing ships have been provided by governmental and private enterprise at Sydney and Newcastle and at six other ports in New South Wales.

In Sydney Harbour there are five large graving docks, three floating docks and eight patent slips. Two graving docks, the Fitzroy and the Sutherland, situated on Cockatoo Island, were leased in 1933 by the Commonwealth Government to a private company for a term of 21 years. Two graving docks are owned by a private company, Mort's Dock and Engineering Company Limited.

During the war, the Captain Cook Graving Dock was constructed primarily for naval purposes in Sydney Harbour between Potts Point and Garden Island. Certain sections of the work were carried out for the Commonwealth Government by New South Wales Government authorities. The dock, opened in March, 1945, is capable of accommodating the largest vessel afloat, and in peace-time is available for the service of civilian vessels. Its breadth is 147 feet 7½ inches, and the length from the outer caisson is 1,139 feet 5 inches. The draught of vessel that may be taken is 40 feet 6 inches. Expenditure on the dock to 30th June, 1946, was £10,018,731.

At Newcastle a floating dock and two patent slips are attached to the State Government Dockyards at Walsh Island, and two slips are privately owned.

Graving docks under the control of the State Government are maintained at some minor ports to meet the needs of vessels engaged in the coastal trade.

## SEAMEN.

Matters relating to the employment of seamen are subject to control by the Commonwealth Government in terms of the Federal Navigation Act. Provision is made for the regulation of the methods of engagement and discharge, the form of agreement, rating, the ship's complement, discipline, hygiene, and accommodation. Mercantile marine offices were established in March, 1922, to undertake functions performed hitherto by State shipping offices at Sydney, Newcastle and Port Kembla, where engagements and discharges are registered. The following statement shows the number of transactions in each year from 1938-39 to 1945-46:—

TABLE 135.—Transactions at Mercantile Marine Offices, 1938-39 to 1945-46.

Year ended 30th June.	Engagements Registered.			Discharges Registered.			Licenses to Ship.	
	Sydney.	Newcastle.	Port Kembla.	Sydney.	Newcastle.	Port Kembla.	Sydney.	Newcastle.
1939	20,856	3,723	285	21,231	3,699	280	450	66
1940	18,866	4,352	571	19,497	4,230	570	532	109
1941	17,426	5,337	479	17,044	5,196	459	643	164
1942	16,862	5,402	718	16,794	5,298	690	761	206
1943	13,010	3,921	432	13,518	3,909	449	397	104
1944	12,080	4,135	439	11,938	4,252	370	232	90
1945	10,606	3,071	493	11,208	3,064	511	230	72
1946	10,588	3,909	503	11,253	3,762	462	342	63

The rates of wages, hours of labour, and conditions under which crews work on vessels engaged in the interstate and coastal trade of Australia have been fixed by awards and agreements under the Commonwealth Conciliation and Arbitration Act.

Under the Defence (Transitional Provisions) Act, 1946, the National Security (Maritime Industry) Regulations remained in force until 31st December, 1947. Under these regulations the Maritime Industry Commission was constituted in January, 1942, to secure adequate and efficient manning of Australian merchant ships and the improvement and safeguarding of conditions of employment therein. The Commission may make orders regarding such matters as hours of work (maximum ordinary hours in 1946 being 44 per week), accommodation, preference of employment, amount to be paid to employees by reason of war risks, etc. Orders of the Commission prevail over State and Federal laws or industrial awards and agreements.

Compensation to seamen is provided by a Federal law, the Seamen's Compensation Act, 1911-1938, which applies to ships trading with Australia, or engaged in any occupation in Australian waters, or in trade and commerce with other countries or among the States.

Seamen employed on New South Wales ships, *i.e.*, ships registered in New South Wales, or owned or chartered by the Government or by a person or body corporate whose place of business is in the State, may claim compensation under the Workers' Compensation Act of New South Wales, if they agree not to proceed under the Federal law, provided such ships are engaged solely in the intra-state trade of New South Wales.

National Security (Medical Benefits for Seamen) Regulations made in August, 1942, provided for payments for medical, surgical and hospital treatment to be made to seamen who suffered war injury; funeral expenses are paid to their dependants in event of their death; continuance of these provisions until 31st December, 1947, was covered by the Defence (Transitional Provisions) Act, 1946.

Provision has been made in terms of a Commonwealth Act passed in August, 1940, and National Security Regulations issued in August, 1942, for the payment of war pensions in respect of Australian seamen who, in the course of their employment, sustain war injury which results in death or incapacity; also for allowances in respect of those who are captured or detained by the enemy. Benefits are provided for dependants, and compensation may be granted to seamen whose effects are lost or damaged by enemy action. These regulations lapsed at 31st December, 1946, but their effect has been preserved by an amendment of the Seamen's War Pensions and Allowances Act effected by the Defence (Transitional Provisions) Act, 1946.

In 1941 the benefits of the War Service Homes Act were extended to seamen domiciled in Australia and employed during the recent war on ships trading overseas.

#### SAFETY OF LIFE AT SEA.

The navigation laws contain stringent provisions designed to prevent unseaworthy ships from proceeding to sea, and to ensure that all vessels are manned by competent crews, that life-saving appliances are carried,



and that special arrangements are made to safeguard dangerous cargoes. Regulations have been framed for the prevention of collisions, also rules regarding the lights and signals to be used.

Pilotage is a State service under the provisions of the Navigation Act of New South Wales. A pilot must be engaged for every vessel entering or leaving a port of New South Wales at which there is a pilotage establishment unless the master holds a certificate of exemption. Such certificates may be granted to British subjects only, for use in respect of British ships registered in Australia or New Zealand and employed in trade between ports in Australasia and the South Sea Islands or engaged in whaling. The pilotage rates are shown on page 158.

Wrecks and shipping casualties which occur to British merchant shipping on or near the coast of New South Wales are investigated by Courts of Marine Inquiry. The majority of wrecks reported are of small coasters under 200 tons.

Lifeboat stations are maintained at Sydney and at Newcastle, and motor lifeboats and life-saving appliances are kept at certain places along the coast. The pilot vessels are fitted for rescue work, and steam tugs are subsidised for assisting vessels in distress.

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## CIVIL AVIATION.

Civil aviation in Australia is subject to the Commonwealth Air Navigation Act, 1920-1936, under which the Governor-General may make regulations to give effect to the Convention for the Regulation of Aerial Navigation (signed in Paris on 13th October, 1919) and to provide for the control of air navigation (a) in relation to trade and commerce with other countries and among the States, and (b) within any territory of the Commonwealth.

The Convention on International Civil Aviation, to which Australia is a party, came into force on 4th April, 1947, replacing the Paris Convention of 1919.

Australia has a seat on the Council of the International Civil Aviation Organisation (I.C.A.O.) and maintains a permanent representative with the organisation in Montreal. The South Pacific Air Navigation Region of I.C.A.O. held its first meeting in Melbourne in February, 1947, with sixteen nations represented.

The Federal Carriage by Air Act, 1935, was passed to give effect to the Convention of Warsaw of 12th October, 1929, covering unified rules for the international carriage of persons and goods by air, defining the rights of passengers, consignors and consignees and the rights and responsibilities of carriers by air.

The New South Wales Air Navigation Act, 1938, applies the Commonwealth Air Navigation regulations to aircraft and air navigation within the State and this, with similar enactments of the other Australian States, provides a uniform system of regulations throughout the Commonwealth.

Proposals for alterations of the Constitution to confer full power over air transport upon the Commonwealth (a) without limit as to period and (b) for a period ending five years after Australia ceased to be engaged in hostilities were refused by the electors at referendums in March, 1937, and August, 1944, respectively.

### *Australian National Airlines Commission.*

In August, 1945, the Australian National Airlines Act was passed in order, amongst other things, to foster trade with other countries and between States, to ensure the establishment and maintenance of plant and equipment for national defence reasons, to expedite the development of the territories of Australia, and to promote the carriage of mail by air.

The Australian National Airlines Commission as constituted under the Act comprises five members, viz., the chairman, appointed for five years, a vice-chairman appointed for four years and three other members appointed for four, three and two years. All are eligible for appointment for further terms of three years. The Commission is to develop and operate air services between States and within and to Commonwealth territories, and only in cases where it cannot provide the services will the

Commonwealth assist others to provide them. The Commission has authority to acquire (by purchase, compulsory acquisition with compensation, lease, etc.), hold, and dispose of aircraft and property. It may establish international airline services with the approval of the Minister. The Commission may not borrow but the Act made an initial appropriation of £3,000,000 for its purposes.

Services inaugurated by the Commission, trading under the name "Trans-Australia Airlines," link Sydney with all the capitals and with important provincial centres in other States, paralleling those of private airlines already in operation.

In operating these services the Commission is deemed to be a common carrier of passengers and goods. Charges under Commonwealth law, other than income tax, are payable, and other rates, taxes and charges may be paid if the Minister approves. Profits which accrue after the provision of reserves are to be applied to debt reduction, new capital expenditure, and the expansion of the Commission's services. Annual estimates of receipts and expenditure are to be submitted to the Minister. The accounts of the Commission must be kept in approved form and must be audited at least annually by the Auditor-General, but are not brought into the public accounts of the Commonwealth.

#### *International Air Services.*

Joint British Commonwealth organisations have become the feature of international air services in relation to Australia. The Commonwealth Air Transport Council, inaugurated in 1945, comprises representatives of the United Kingdom, Australia, Burma, Canada, Ceylon, India, Newfoundland, New Zealand, South Africa and Southern Rhodesia. It was set up to keep under review the progress of inter-Empire air communications, for mutual consultations and to advise the governments on civil aviation matters. The South Pacific Air Transport Council, with similar functions in respect of the South Pacific region, has representatives of the United Kingdom, Australia, New Zealand and the Fiji and Western Pacific High Commission. It first met in Canberra in December, 1946. The Secretariat for this Council is provided by the Australian Department of Civil Aviation.

Qantas Empire Airways Limited, now owned by the Commonwealth Government, is to operate overseas services other than those in which the Commonwealth participates as a partner with other governments. It conducts an Australia-London service in co-ordination with that of the British Overseas Airways Corporation along the same route. New Zealand, Australia and the United Kingdom are partners in Tasman Empire Airways (operating the Australia-New Zealand service) in which their capital holdings are to be 50, 30 and 20 per cent., respectively.

In June, 1946, Canada agreed to establish an air service by Canadian National Airways between that country and Australia. Australia undertook to establish a parallel service, and an interim service between Sydney and Vancouver is being operated by Australian National Airways (a private company) under contract to British Commonwealth Pacific Airlines Limited. The last-mentioned company, of which the shareholders are the governments of Australia, New Zealand and the United Kingdom, was

established on 24th June, 1946, after discussions by the South Pacific Air Transport Council, and ultimately it is to operate British Commonwealth airlines in the Pacific Area.

A reciprocal agreement between Australia and the United States of America was signed in December, 1946, and accords mutual rights to pick up and discharge international air traffic in passengers, cargo and mails on the Sydney-Fiji-Canton Island-Honolulu-San Francisco-Vancouver route. The agreement, through control of fares and rates, will protect regional services which Australia contemplates operating between Australia and important neighbouring islands.

#### *Interstate and Intra-State Air Services.*

Regular air services carry passengers, freight and mail between Sydney and each State capital. From Sydney the daily average number of return flights is sixteen to Melbourne, ten to Brisbane and three to Adelaide. Most of the services use aircraft of twenty-four passengers capacity but there are some planes which carry up to fifty passengers.

There are direct services to Melbourne, Brisbane and Adelaide connecting with others from Melbourne to Hobart and to Perth and from Adelaide to Darwin. Canberra is an intermediate stop on the Sydney-Melbourne and Sydney-Adelaide routes and there is a separate daily return service between Sydney and Canberra. Intra-state services enable passengers to travel by air between Sydney and important towns throughout the Commonwealth.

In New South Wales there were two intra-state air services in 1945 and twelve in 1947. Those in 1947 carried passengers, freight and mail to towns as far apart as Bega in the south, Evans Head in the north, and Bourke in the west, making an average of one return trip per day. Some intra-state passengers and freight are carried on interstate airlines; for instance, Wagga Wagga is an intermediate stopping-place of one Sydney-Melbourne service.

#### AIRPORTS.

In New South Wales there are civil airports at many of the larger cities and towns. The Kingsford Smith Airport at Mascot is the major Australian international terminal and the airport of Sydney, and is situated about five miles south of the city. Investigation of other possible sites confirmed the Kingsford Smith Airport as the most suitable for these purposes and its development is to proceed in step with requirements. The first stage, approved in March, 1946, involves an estimated expenditure of £5,000,000, and is expected, when completed, to meet the needs of the next ten years.

There were eighty aerodromes and emergency landing grounds in New South Wales at 30th June, 1947, beside a Government flying boat base and three emergency alighting areas. Particulars of the civilian airfields in operation at 30th June in each year since 1940 are given in the next table. The decrease in numbers in the war years was attributable to the taking-over of ground facilities by the Royal Australian Air Force.

TABLE 133.—Government and Licensed Civil Aerodromes, etc., New South Wales:—

At 30th June—	Government Aerodromes.	Government Emergency Grounds.	Licensed Aerodromes.	Total of Foregoing.
1940 ... ..	10	37	50	97
1941 ... ..	9	19	50	78
1942 ... ..	7	17	48	72
1943 ... ..	8	12	45	65
1944 ... ..	8	7	44	59
1945 ... ..	9	11	47	67
1946 ... ..	13	8	47	68
1947 ... ..	23	7	50	80

It is the policy of the Commonwealth Government to own, develop, maintain and control airports at capital cities, those necessary for international services, and those airports and airfields serving as approved stopping-places (or as essential maintenance, alternate, or emergency landing grounds) for which airline licenses have been or are to be issued. Airfields other than those on the routes of regularly operated domestic services may be approved as optional stopping-places, and those not in any of the foregoing categories as approved landing places for aircraft, but only in exceptional circumstances will these airfields be purchased, hired, developed or maintained by the Commonwealth. However, the Department of Civil Aviation will give local authorities and private owners technical assistance and advise as to the suitability of projected locations to encourage the provisions of landing grounds for local needs and for emergency use.

#### STATISTICS OF CIVIL AIR TRAFFIC.

Figures relating to air transport published hitherto in this Year Book covered only the operations of the principal airline companies registered in New South Wales. The statistics given in the following table are drawn from figures compiled by the Department of Civil Aviation and relate to regular services (excluding one oversea service) with terminal in New South Wales.

The particulars are inclusive of traffic between other States for which landings in New South Wales were intermediate only, and passengers carried through New South Wales on journeys from and to other States are counted once for each portion of the journey. As certain operations (*e.g.*, those by private owners, under independent charter, etc.) are excluded, the table does not present a complete statement of civilian air traffic in New South Wales, but the figures may be taken as illustrating the general development of air transport services in the State. The extent of intra-state air traffic is not measurable as the intra-state business handled by interstate airlines is not stated separately.

TABLE 137.—Air Transport, Regular Services, New South Wales.

Particulars.	Year ended 30th June, 1945.				Year ended 30th June, 1946.			
	Intra-state Airlines.	Inter-state Airlines.*	Oversea Airlines.	Total, All Air-lines.	Intra-state Airlines.	Inter-state Airlines.*	Oversea Airlines.	Total, All Air-lines.
Hours flown ... hrs.	1,817	33,490	3,786	39,093	2,558	42,601	22,645	67,804
Miles flown ... '000	154	4,680	605	5,439	244	6,160	4,265	10,669
Passengers ... No.	4,019	133,982	6,489	144,490	7,602	198,113	16,551	222,266
Passenger miles '000	860	59,821	8,673	69,354	1,307	84,752	34,305	120,364
Freight carried tons	4.3	1,196.1	32.1	1,232.5	23.8	2,238.4	152.2	2,414.4
Freight ton mls. '000	0.9	547.2	43.4	591.5	4.8	988.1	406.3	1,399.2
Mail carried ... tons	0.8	1,911.0	108.2	2,020.0	0.7	960.8	564.4	1,525.9
Mail ton miles. '000	0.2	966.8	177.7	1,144.7	0.1	441.2	2,032.5	2,473.8

\* Passengers, etc., en route to other States, are counted on each part of the journey to and from Sydney.

In 1945-46, as compared with the preceding year, the number of passengers carried (222,266) increased by 53.8 per cent. and the quantity of freight carried (2,414.4 tons) was 95.9 per cent. greater. Although the weight of mail carried (1,525.9 tons) was less by 24.5 per cent., the mail ton mileage (2,473,800) increased by about 112 per cent.

#### AERO CLUBS.

Aero clubs are assisted by the Commonwealth Government by grants and advances, and where practicable by the use of suitable hangar accommodation without charge. Grants are made for the maintenance of aircraft of £25 per annum for every completed period of fifty airborne hours up to a maximum of 200 hours; of £50 for each beginner trained to "A" license standard, and of £10 for each license renewed on club aircraft. The issue (training) and renewal bonuses to country aero clubs may be increased to £60 and £12 10s. respectively. The clubs assisted in New South Wales in 1946 were the Royal Aero Club of New South Wales and the Newcastle and Broken Hill Aero Clubs.

#### AIR AMBULANCE AND "FLYING DOCTOR" SERVICES.

An air ambulance service for the conveyance of a medical practitioner to urgent cases and for the transport to hospital when necessary of patients from isolated areas is operated from Broken Hill. Weekly visits to certain districts in central New South Wales where no doctor is in residence are made by a "flying doctor" and air ambulance service operated by a doctor resident in Forbes. The miles flown by these services in 1945-46 were 24,373 from Broken Hill and 22,000 from Forbes.

## POSTS AND TELEGRAPHS.

The postal, telegraph, and telephone services of New South Wales have been controlled by the Commonwealth Government since 1st March, 1901. The services are administered by a Minister of the Crown, with a permanent salaried officer in charge of the central executive office, and a deputy in each State.

The wireless services come under the jurisdiction of the Postmaster-General from whom licenses must be obtained for all classes of stations. The broadcasting system consists of (a) Commercial Broadcasting Services operated under licenses from the Minister and (b) the National Broadcasting Service, the programmes for which are provided by the Australian Broadcasting Commission. The provision and operation of the national stations is the function of the Postmaster-General's Department.

The Department keeps pace with the advance of science and invention in the provision of facilities for communication throughout Australia and with other parts of the world. Research laboratories are maintained for the investigation of the many technical difficulties which have arisen with the extension of the telephone system, the development of wireless telegraphy, the aerial transportation of mails and other problems relating to its activities.

The rates and charges for the postal and other services are uniform in all the States of the Commonwealth.

### POSTAL SERVICES.

Post offices have been established throughout New South Wales, even in localities where there are few residents. The scope and nature of the service provided depend upon the local conditions. There were 2,525 post offices in the State at 30th June, 1945, of which 462 were official (*i.e.*, conducted exclusively by full-time departmental officials), 9 semi-official, and 2,024 non-official. The number at 30th June, 1944, was 2,495. The transport of mails in outlying districts has been expedited considerably in recent years by an extended use of motor vehicles and aerial services. The number of inland and coastwise mail services in operation in New South Wales in 1944-45 was 2,033. The cost of road and coastwise services amounted to £328,272, and of railway services to £256,319. In 1943-44 the number of services was 2,026, and the cost of services—inland and coastal £311,536, and railway £224,123.

The transportation of mail by air services within and beyond Australia is being expanded continuously both as to range and the frequency of services. The air mails are carried by commercial airlines under contracts to the Department, generally at a predetermined rate per weight of mail carried, though in some cases a subsidy on a flight-mileage basis is paid.

Because of the geographical nature of the services information cannot be compiled on a State basis; for the Commonwealth as a whole, £1,672,043 (including £74,719 for overseas mail) was expended for the carriage of mails by air in 1945-46.

The following table shows particulars of articles posted in New South Wales for delivery within the Commonwealth and of articles despatched to and received from places beyond the Commonwealth for each year since 1940-41. Particulars of postal matter received from other Australian States are not available.

TABLE 138.—Letters, etc., Posted and Received in New South Wales, 1940-41 to 1944-45.\*

Particulars.	Year ended 30th June.				
	1941.	1942.	1943.	1944.	1945.
Letters, Post Cards, Letter Cards, and articles in envelopes—	Thousands omitted.				
Posted for delivery within the Commonwealth ... ..	347,484	352,747	333,184	334,289	342,236
Despatched to and received from places beyond the Commonwealth	26,092	23,231	15,264	22,083	23,837
Total ... ..	373,576	375,978	348,448	356,372	366,073
Registered Articles (except Parcels)—					
Posted for delivery within the Commonwealth ... ..	3,311	4,122	5,684	7,191	7,765
Despatched to and received from places beyond the Commonwealth	368	254	148	173	288
Total ... ..	3,679	4,376	5,832	7,364	8,053
Newspapers and Packets—					
Posted for delivery within the Commonwealth ... ..	52,969	75,179	63,951	67,170	72,898
Despatched to and received from places beyond the Commonwealth	8,376	11,561	7,340	8,234	9,011
Total ... ..	61,345	86,740	71,291	75,404	81,909
Parcels (including those Registered)—					
Posted for delivery within the Commonwealth ... ..	4,190	4,229	5,061	6,990	6,742
Despatched to and received from places beyond the Commonwealth	702	919	557	364	360
Total ... ..	4,892	5,148	5,618	7,354	7,102

\*Includes Australian Capital Territory.

The Dead Letter Office in New South Wales handled 793,164 letters and post cards and 192,749 packets and circulars during 1944-45. Of these 766,019 were returned direct to the writers or delivered, 197,810 were destroyed, and 22,084 were returned as unclaimed to other States and countries. Money and valuables amounting to £56,381 were contained in postal articles sent to the Dead Letter Office. In 1943-44 the Dead Letter Office handled 951,131 postal articles and the money and valuables contained therein amounted to £58,579.



The postage rate for letters to places within the British Empire is 2d. per oz., with the addition of a war postage charge of  $\frac{1}{2}$ d. per letter imposed as from 10th December, 1941. For registration the charge is 3d. per letter or article.

The rates of postage by air mail are as follows: to places within the Commonwealth, New Guinea and Papua, 3d. per half ounce in addition to ordinary postage plus  $\frac{1}{2}$ d. per article war postage; New Zealand, post cards 3d. and other articles 5d. per half ounce (plus war postage); Africa, Asia and Europe, post cards 9d. and other articles 1s. 6d. per half ounce; and America, varying charges according to the country concerned.

An air-letter service is in operation between Australia and the United Kingdom, Canada, Newfoundland and British countries in Africa, Asia and Europe. Special lightweight air-letter forms are supplied at 7d. each, the charge covering both postage and air mail fees.

A system of cash on delivery post—chiefly for the convenience of people who reside at a distance from trading centres—is in operation in the Commonwealth, Norfolk and Lord Howe Islands and Fiji. On delivery of an article, the Post Office collects from the addressee a sum of money specified by the sender and transmits it to him. During the year ended 30th June, 1945, the number of such articles posted in New South Wales was 377,100. The value collected was £521,647, and the revenue, that is, postage and commission, £52,526. In 1943-44 the number of articles was 359,500, value collected, £518,268 and revenue, £49,283.

Amongst other postal facilities provided are: express collection and delivery of postal articles at post offices where messengers are employed; a business reply service for advertisers, etc., enabling them to pay postage on replies actually received; a permit mail system under which sealed printed circular letters are posted at printed matter rates; private mail boxes continuously accessible at post offices to holders; private mail bags in country areas; and the use, under license, of stamp franking machines. There were 21,619 private mail boxes and 5,872 private mail bags in New South Wales at 30th June, 1945.

The postal branch of the Department transacts money order and postal note business. Money orders are issued and redeemed within Australia, and are issued upon and paid to the order of other countries by international arrangement. A poundage charge is made on the issue of money orders and postal notes. The latter are payable only within the Commonwealth and the maximum amount of a postal note is £1. Particulars of transactions in money orders and postal notes are given in the chapter "Private Finance" of this Year Book.

#### TELEGRAPHS.

The telegraph system embraces the whole Commonwealth. It has been extended steadily since January, 1858, when the system was opened to the public in New South Wales, and modern equipment has been installed in the chief centres to expedite the transmission of messages.

In June, 1940, uniform rates were introduced for the transmission of telegrams within the Commonwealth irrespective of State boundaries. The charge for the transmission of an ordinary telegram of fourteen words is 9d.

between offices 15 miles apart and 1s. between offices more than 15 miles apart. An additional charge of 1d. is made for each word in excess of fourteen. Double rates are charged for urgent telegrams.

For a telegraphic message to any part of the British Empire the ordinary rate is 1s. 3d. per word and for a deferred message half the ordinary rate, with a minimum charge for five words in plain language. Daily letter telegrams with normal delivery on the morning of the second day after the date of lodgment are accepted for transmission to certain places beyond Australia at one-third of the ordinary rate, with a minimum charge as for twenty-five words. Social letter-telegrams for transmission within the Empire are charged at the rate of 5d. per word, with a minimum charge of 5s. Press telegrams are handled by telegraph or cable at cheap rates under special conditions.

*Overseas Telecommunications Act, 1946.*

Following upon meetings of the Commonwealth Communications Council (representative of the Governments of the United Kingdom, the Dominions, India and Southern Rhodesia) in London in May, 1944, and in July and August, 1945, the principle was accepted that Empire communications, both cable and radio, should be nationally owned and operated, partly, for Empire defence reasons, to ensure survival of the cable system. The agreements concluded provide for a unified policy without interfering with local administration by the several governments, yet integrated and co-ordinated to ensure strength, efficiency and economy of operation of the organisations conducting Empire and international communications.

The agreement involved for the Australian Government full ownership of the "Beam" service conducted by Amalgamated Wireless (Australasia) Limited (of which it already held half the total plus one share), which, with Cable and Wireless Limited (to be acquired by the British Government) provided the overseas telecommunication services of Australia. Profits arising from the telecommunication services of the partner governments are to be shared equitably between them. The Commonwealth Telecommunications Board (to be established in London, to succeed the Commonwealth Telecommunications Council), on which each Government will be represented, will provide permanent liaison between them.

The Overseas Telecommunications Commission (Australia) constituted under the Overseas Telecommunications Act, 1946, on 23rd August, 1946, has acquired the overseas telecommunications assets situated in Australia in terms of that Act. It has taken over persons employed in the telecommunications services of the operating companies, and is required, *inter alia*, to establish, maintain and operate cable and radio-telegraph services between Australia and overseas countries, ships at sea, commercial and private aircraft (except those operating exclusively in Australia) and Territories of the Commonwealth; to establish, maintain and operate public telephone services between Australia and overseas countries, and itself and in conjunction with the Commonwealth Telecommunications Board in London, to undertake investigations and researches toward improving the efficiency of overseas telecommunications generally.

The Commission acquired the telecommunications assets and business of Amalgamated Wireless (Australasia) Limited for the sum of £1,400,000, and is operating the radio-telegraph services. Accounts of the Commission

are subject to at least annual inspection and report by the Auditor-General, and annual estimates of receipts and expenditure, and an annual report upon its operations, must be submitted by the Commission to the Minister. In the operation of its services the Commission is subject to the provisions of the Wireless Telegraphy Act, 1905-36, and the Post and Telegraph Act, 1901-34.

In matters the subject of the agreement the Commission is required to consult the Commonwealth Telecommunications Board, and Ministerial approval must be obtained to change the rates charged, or the apportionment thereof, to withdraw any category of oversea messages or communications, to discontinue or institute oversea services, and to extend or alter any part of the system affecting the Empire telecommunications network. Action or decisions relating to or affecting the defence policy of the British Commonwealth may not be taken by the Commission on its own volition.

*Telegraphic Business.*

The following table shows the number of telegrams despatched in New South Wales for delivery within the Commonwealth including messages to Tasmania, and the number of telegrams despatched to and received from countries outside Australia, in various years since 1921. The total number of telegrams handled in New South Wales cannot be stated, as full particulars are not available regarding messages received from other States. Telegrams in transit through the State are not included.

TABLE 139.—New South Wales, Telegrams, 1920-21 to 1944-45.

Year ended 30th June.	Telegraph Stations.	Telegrams despatched for delivery in Australia.	International Telegrams.		Revenue Received.
			Despatched.	Received.	
					£
1921	2,252	5,906,243	249,705	263,482	489,805
1929	3,069	5,972,606	415,813	388,093	526,503
1931	3,055	4,609,851	326,857	282,253	384,452
1939	3,061	6,242,494	375,198	391,250	471,710
1941	3,075	6,873,167	414,781	460,632	519,654
1942	3,085	8,213,968	557,055	574,535	659,558
1943	3,123	9,967,562	553,186	613,531	794,325
1944	3,071	11,078,596	507,518	665,648	847,754
1945	3,079	12,060,011	479,348	572,688	906,677

The revenue from telegraph business in New South Wales in 1944-45 amounted to £906,677, and is the highest amount recorded.

The foregoing statement includes only messages transmitted by land line or submarine cable. Particulars of business transacted by radio-telegraph, distinguishing that with oversea countries and that with neighbouring islands, vessels, etc., within range of coastal stations are given in the next table.

The Telecommunications Commission may use either cable or wireless according to advantage for the transmission of any message and the rates charged to destinations within the British Empire and the United States are the same by either method of transmission. The services

under the Beam system were commenced with the United Kingdom on 8th April, 1927, and with Canada on 16th June, 1928. A Beam wireless picturegram service between Australia and the United Kingdom and North America was inaugurated on 1st October, 1934.

Combining the totals given in Tables 139 and 140 it is seen that the number of international messages sent from and received in New South Wales in 1944-45 (1,567,824) was more than 50 per cent. greater than in 1938-39.

TABLE 140.—New South Wales—Radio Traffic, 1935-36 to 1944-45.

Year ended 30th June	Coastal.		Beam Wireless.			
	Messages.	Words.	Originating in New South Wales.		Terminating in New South Wales.	
			Messages.	Words.	Messages.	Words.
1936	101,095	1,848,543	144,807	3,192,797	114,664	3,436,931
1937	110,917	1,998,878	158,179	3,541,542	134,925	4,247,742
1938	112,751	1,782,459	221,012	3,536,203	191,831	4,603,933
1939	117,980	1,862,339	146,538	3,216,674	139,432	4,430,537
1940	78,764	1,777,451	140,492	3,982,406	149,180	6,574,070
1941	91,477	2,239,665	136,022	4,269,365	171,953	7,709,102
1942	68,937	2,681,636	168,364	5,338,765	210,203	11,818,293
1943	46,768	1,351,971	198,803	5,725,792	286,973	14,765,251
1944	90,071	4,795,223	199,912	6,262,503	445,003	16,966,858
1945	37,333	4,037,573	142,838	6,849,955	372,914	20,857,006

During the World War, 1939-45, direct radio-telegraph circuits were established by the United States of America with Empire points, including two between San Francisco and Sydney. As a result of the Bermuda Conference in November, 1945, between representatives of the United States and British Empire Governments and decisions following thereupon, harmonious and co-ordinated working of British Commonwealth and United States telecommunication systems throughout the world has been arranged.

#### *Wireless Licenses and Broadcasting.*

Private installations for wireless communication and for broadcasting are operated under license, but are not permitted to engage in commercial traffic unless authorised to do so. A national broadcasting service was inaugurated in July, 1929, and two private stations in New South Wales were transferred to the control of the Commonwealth Government.

The national service is controlled by the Australian Broadcasting Commission, but the radio stations and technical services are owned and operated by the Postmaster-General's Department. The funds of the Commission are derived mainly from the allocation of a proportion of the amount received in Broadcast Listener's License fees, but, when occurring, deficiencies have been met by revenue appropriation.

The Commission provides the national broadcast programmes, has power to establish groups of musicians to provide orchestral, choral and

band music, and under the Australian Broadcasting Act, 1942, as amended in 1946, is required to broadcast daily sessions of news and information and to establish and maintain its own news-gathering service, though it may have recourse also to overseas news agencies and information sources.

There are 7 national and 35 licensed broadcasting stations in New South Wales, and a national and a licensed station in the Australian Capital Territory. The commercial broadcasting stations pay a license fee of £25 and their programmes are subject to oversight by the Postmaster-General. For their income they are dependent upon receipts from broadcast advertising and publicity.

A broadcast listener's license must be held in respect of every radio receiving set in use. For the first set the fee is £1 per annum except in locations distant more than 250 miles from a national station, where the fee is 14s. For each receiver in excess of one the fees are 10s. and 7s. respectively. Blind persons and schools with less than fifty pupils may be given licenses without charge and in certain circumstances pensioners may be charged one-half the license fee. Schools, hospitals and charitable institutions may be exempted from the licensing of appliances in excess of one.

The number of broadcast listeners' licenses in New South Wales and the Australian Capital Territory at 30th June, 1929, and later dates is shown below; since 1943 these include supplementary licenses covering receivers in excess of one, of which there were 25,796 at 30th June, 1946:—

TABLE 141.—Broadcast Listeners' Licenses, 1929 to 1946.

At 30th June.			Licenses in Force.	At 30th June.			Licenses in Force.
1929	...	...	100,798	1941	...	...	494,884
1932	...	...	141,450	1942	...	...	500,451
1936	...	...	315,731	1943	...	...	552,044
1938	...	...	403,978	1944	...	...	560,032
1939	...	...	433,029	1945	...	...	572,697
1940	...	...	458,155	1946	...	...	575,864

## TELEPHONES.

The telephone system, established in Sydney in 1880, has been extended throughout the State. Trunk lines serve practically all settled areas in Australia. The first line between Sydney and Melbourne was brought into use in 1907, and between Sydney and Brisbane in 1923. The services were extended to Northern Queensland in 1930, to Western Australia in 1931 and to Tasmania in 1936. The "carrier wave" system of operating long-distance telephone traffic is used so that a number of conversations may be conducted simultaneously over one pair of wires.

The following table shows the growth of the telephone service in New South Wales (including the Australian Capital Territory) since 1921:—

TABLE 142.—Telephones, 1921 to 1945.

At 30th June.	Exchanges.	Number of Lines Connected.	Public Telephones.	Telephone Instruments Connected.	No. of Instruments per 1,000 of Population.
1921	921*	74,490	1,693	96,710	45·9
1929	1,890	146,492	2,779	193,718	77·1
1931	1,946	141,445	2,944	188,345	73·5
1939	2,010	189,915	4,223	257,246	93·2
1941	2,018	205,097	4,469	280,161	99·8
1942	2,025	206,103	4,653	285,243	100·8
1943	2,014	210,112	4,885	295,266	103·4
1944	2,019	217,345	4,986	308,016	106·7
1945	2,027	225,832	5,032	320,198	109·9

\* Offices with only one line connected are not included.

At 30th June, 1945, there were in New South Wales 2,027 telephone exchanges with which 225,832 lines were connected. The number of instruments in use was 320,198, including 311,851 subscribers' instruments, 5,932 public telephones, and 3,315 connected with other exchange services; there was an instrument to every nine persons in the State. The revenue derived from the telephone services in New South Wales during the year amounted to £4,999,188.

The annual ground rent for an exclusive telephone service ranges from £3 5s. in respect of country exchanges where the number of subscribers' lines in the local call area does not exceed 300, to £5 for a residence service and £6 5s. for a business service in the metropolitan area. For each effective outward (local) call where the number of lines in the area does not exceed 300, a charge of 1½d. per call is made; at other exchanges the charge is 1½d.

#### FINANCIAL RESULTS OF POSTAL SERVICES.

Particulars regarding the financial results of operations in the various branches of the Postmaster-General's Department in New South Wales during the year ended 30th June, 1945, are as follows:—

TABLE 143.—Postmaster-General's Department, Revenue and Expenditure in New South Wales, 1944-45.

Branch.	Earnings.	Working Expenses.	Surplus.	Interest on Capital and Exchange Charges.	Net Profit.
	£	£	£	£	£
Postal ... ..	4,339,899	3,295,166	1,044,733	59,972	984,761
Telephone ... ..	1,240,741	838,740	411,001	35,254	375,747
Telegraph ... ..	4,999,188	2,068,744	2,930,444	600,213	1,430,231
Wireless ... ..	266,603	313,712	(—) 47,109	5,848	(—) 52,957
Total, All Branches ...	10,855,431	7,416,362	3,439,069	701,287	2,737,782

(—) Denotes loss.

The total net profit amounted to £2,737,782 in 1944-45, as compared with £1,621,934 in 1938-39. Increases in the various branches between 1938-39 and 1944-45 were: postal £105,724, telegraph £372,050, and telephone £745,054. There was a net profit of £54,023 in the wireless branch in 1938-39, and a loss of £52,957 in 1944-45.

A comparative statement of finances for the period 1938-39 to 1944-45 is shown below:—

TABLE 144.—Postmaster-General's Department, Revenue and Expenditure in New South Wales, 1938-39 to 1944-45.

Year ended 30th June.	Earnings.	Working Expenses.	Surplus.	Interest on Capital and Exchange Charges.	Net Profit.
	£	£	£	£	£
1939 ... ..	7,168,409	4,871,910	2,206,499	674,565	1,621,934
1940 ... ..	7,374,134	4,953,874	2,390,160	718,751	1,671,409
1941 ... ..	7,854,733	5,231,777	2,622,956	756,405	1,866,461
1942 ... ..	8,884,043	5,769,583	3,114,460	757,644	2,356,816
1943 ... ..	9,782,945	6,619,996	3,162,949	739,403	2,423,546
1944 ... ..	10,407,780	7,118,012	3,289,768	717,306	2,572,462
1945 ... ..	10,855,431	7,416,362	3,439,069	701,287	2,737,782

#### POSTAL DEPARTMENT EMPLOYEES.

At 30th June, 1945, there were 25,361 persons employed by the Postal Department in New South Wales. Of these, 11,317 were permanent employees, 2,038 non-official postmasters, 594 telephone office keepers, 2,498 mail contractors (including drivers) and there were 8,914 other employees.

## LAND TRANSPORT.

The initial problem of establishing an efficient system of transport in New South Wales was rendered difficult by several causes, viz., the existence of a belt of rugged highlands comparatively near the coast readily passable at only a few points; the consequent difficulty in connecting the coast with the interior; the absence of navigable rivers and waterways; and the scattered nature of the settlement.

The early policy of the government made Sydney the centre of the whole settlement commercially as well as politically. With the advantageous situation on an unrivalled natural harbour, it became from the earliest times the point from which the roads radiated, and to which trade and commerce were drawn, despite the facts that the neighbourhood was not well adapted for agriculture and that access to the fertile interior was impeded by difficult mountains. In point of situation, Port Stephens to the north and Jervis Bay to the south of Sydney are excellent natural harbours.

The interior of New South Wales is connected with the sea by rail at various points and parts of the southern Riverina are served by border railways of the Victorian Government system giving access to ports on the southern coast of Australia.

The favourable climatic conditions and vast spaces of New South Wales are conducive to the development of aviation. Air services within the State and with other Australian States and oversea countries form an integral part of the transport system.

### *Land Transport Services.*

State ownership of land transport services in New South Wales embraces practically all the railways and tramways, and a major share of the motor omnibus services in Sydney and Newcastle. The land transport services conducted by private enterprise are subject to a measure of State supervision.

A series of important changes were made between 1930 and 1932 in the administration of these services. Previously the railways and tramways were controlled by the same statutory body, which consisted of three Commissioners appointed by the Governor; the other land transport services were subject to a measure of supervision by the police and local authorities, and matters relating to the maintenance and construction of main roads were administered by the Main Roads Board.

The new arrangements, which are described in the 1933-39 issue of the Year Book on page 360 were designed for the improvement and co-ordination of the services and the elimination of wasteful duplication. A Commissioner for Road Transport was appointed in 1930, Transport Trusts were constituted to supervise the services in the Metropolitan and Newcastle Districts, and the tramways were removed from the control of the Railway Commissioners and vested in the Transport Trusts.



In 1932 a Department of Transport was created under a responsible Minister of the Crown. The offices of the Railway Commissioners, the Transport Trusts, the Commissioner of Road Transport, the Tramways Management Board, the Main Roads Board, and the State Transport (Co-ordination) Board were abolished, and their functions transferred to a Board of Transport Commissioners, comprising a Chief Commissioner, seven other Transport Commissioners to supervise the various branches of the Department, and the Commissioner of Police.

After a short period the Board of Transport Commissioners was abolished, and the Ministry of Transport was divided into three departments, each under the control of a Commissioner, viz., (1) railways, (2) road transport and tramways, (3) main roads. Authority was given for the appointment of an assistant commissioner in each department.

There is an Australian Transport Advisory Council, consisting of Commonwealth and State Ministers for Transport, with the function of developing a common national policy on transport matters.

#### *War-time Control of Land Transport.*

By National Security (Land Transport) Regulations provision was made for control by the Commonwealth of rail and road transport during war-time. Under the Defence (Transitional Provisions) Act, these Regulations will remain in force until 31st December, 1947.

The Regulations are administered by the Commonwealth Department of Transport with the assistance of State Transport Authorities. During the war years, they were used extensively to control matters such as household deliveries, taxi-cab and hire car operations, the sale of new motor vehicles, and interstate railway passenger traffic. They were administered in close conjunction with other controls, particularly petrol rationing and the control of sales of motor tyres and tubes. The carriage of goods by rail and road was regulated under National Security Regulations administered by the Department of War Organisation of Industry. At 1st January, 1947, the only controls remaining in force under the National Security (Land Transport) Regulations were those relating to the sale of new motor cars and utility motor lorries.

Further details of the more important controls are contained in the chapter on "Motor and Other Licensed Vehicles".

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## ROADS AND BRIDGES.

### LENGTH OF ROADS.

The total length of the roads in the State was estimated at 126,058 miles in 1939. The nature of the roads and their distribution in municipalities and shires are shown in the following table:—

TABLE 145.—Length of Roads, 1939.

Nature of Road, Street or Lane.	Municipalities,			Shires.	Western Division.	Total N.S.W.
	Metro-politan.	New-castle.	Other.			
	miles.	miles.	miles.	miles.	miles.	miles.
Cement Concrete ...	205	19	23	85	...	332
Asphaltic Concrete ...	210	14	4	20	...	248
Wood-paved ...	32	...	...	...	...	32
Tar or Bituminous						
Macadam ...	1,398	77	735	1,069	3	3,282
Surfaced Waterbound						
Macadam ...	248	15	467	1,856	5	2,591
Waterbound Macadam...	320	34	360	2,963	7	3,684
Gravel or Crushed Rock	417	113	1,852	24,121	534	27,037
Formed only ...	241	26	1,151	21,864	1,809	25,091
Cleared only ...	56	22	1,035	24,665	1,558	27,336
Natural Surface ...	210	5	746	31,614	3,850	36,425
Total ...	3,337	325	6,373	108,257	7,766	126,058

The density of roads varies greatly in the different divisions. Within the populous Sydney and Newcastle districts there were in 1939, on the average, approximately 13 miles of road to every square mile. In the other municipalities, which include the larger country towns outside Sydney and Newcastle, the average was 3.4 miles, of which 2.5 miles were formed roads (i.e., excluding cleared only and natural surface). In the shires, which consist for the most part of agricultural and pastoral lands, the averages per square mile were much lower; viz., all roads 0.6 miles and formed roads 0.29 miles. There has been little road development in the unincorporated Western Division, as this vast area of about 125,000 square miles is devoted almost exclusively to sheep-raising on large holdings. The length of roads in the Western Division was 7,766 miles in 1939, and 7,905 miles in 1946.

Particulars of the principal roads are published in the 1938-39 issue of the Year Book on page 362.

### MAIN ROADS ADMINISTRATION.

An outline of the systems of road administration in New South Wales up to 1925 was given in earlier editions of this Year Book.

The Main Roads Act, 1924, was brought into operation by proclamation as from 1st January, 1925. The first Main Roads Board was appointed in the following month and commenced operations on 12th March, 1925. The functions of the Board were transferred in 1932 to the control

of a Board of Transport Commissioners to be administered in co-ordination with the railways and tramways and other transport services. Subsequently the mains roads administration was reorganised as a separate department in the Ministry of Transport under the control of a commissioner who, with an assistant commissioner, is appointed for a term of seven years.

The Main Roads Department exercises control over Governmental activities in connection with road works. These activities embrace works on main and developmental roads throughout the State, all roads in the unincorporated portion of the Western Division and proclaimed national works, principally bridges and ferries, which were constructed from Government funds.

The Department co-operates with the municipal and shire councils in the work of constructing and maintaining a well-organised system of main highways, with the primary object of developing the lands in the State, feeding the railways with traffic, giving the primary producers access to markets, and providing facilities for modern motor traffic.

Public roads, except those within the City of Sydney, may be proclaimed as main roads upon the recommendation of the Commissioner. The most important classes of main roads are (1) the State highways, which form the principal avenues of road communication between the coast and the interior or throughout the State and connect with similar avenues in other States; (2) trunk roads, which, with the State highways, form the framework of a general system of inter-communication throughout the State; (3) ordinary main roads, which are those not classified as highways or trunk roads. From 1945, main roads to serve through motor traffic, to be known as motorways, may be provided. Access to these from abutting lands and side roads will be restricted.

Any road, not being a main road, may be proclaimed as a developmental road if it will help to develop a district, and a short section of roadway may be proclaimed a developmental work. The whole or part of the cost of construction of developmental roads and works may be provided from a fund formed in the Main Roads Department for the purpose.

A classification of the proclaimed main roads in the State at 30th June, 1946, is shown below:—

TABLE 146.—Length of Proclaimed Main Roads, 30th June, 1946.

Class of Road.	County of Cumberland.	Country.	Total.
	Miles.	Miles.	Miles.
State Highways ... ..	193	4,954	5,147
Trunk Roads ... ..	...	2,367	2,367
Ordinary Main Roads ... ..	582	9,029	9,611
Total ... ..	775	16,350	17,125

There were, in addition, 2,749 miles of developmental roads and 76 miles of secondary roads; one mile of the former and all the latter roads are within the county of Cumberland.

The terms of the Main Roads Act require that the moneys of the Main Roads Department be kept in separate funds: (1) the County of Cumberland Main Roads Fund for metropolitan main roads, *i.e.*, those in the County of Cumberland which, for the purposes of the Act, is deemed to include the municipalities of Katoomba and Blackheath, the shire of the Blue Mountains, and small sections of the Bulli, Colo, and Blaxland shires added in 1929; (2) the Country Main Roads Fund; (3) the Developmental Roads Fund. Another fund—the Federal Aid Roads Fund—was kept for moneys to be applied to road works in terms of an agreement between the States and the Commonwealth, as described on page 184; it was closed at 30th June, 1934.

The income of the two Main Roads Funds is derived chiefly from (*a*) the proceeds of taxes on motor vehicles; (*b*) grants from the Federal Government; (*c*) contributions by municipal and shire councils; and (*d*) loan moneys appropriated for the main roads.

In the initial stages of the Department's activities substantial grants were paid to the various funds from the State revenues, and in 1930-31 and the two years ended 30th June, 1942, payments were made from unemployment relief funds.

The resources of the Developmental Roads Fund were derived mainly from State loan appropriations until the end of 1939, and later (until May, 1942), from a share of motor taxes. Substantial grants were made to the fund from the proceeds of Commonwealth petrol tax and from State revenues prior to 1930-31, and large amounts were transferred from the Country Main Roads Fund in the years 1933-34 to 1935-36.

The proceeds of the motor tax, with the exception of a small proportion paid into the Public Vehicles Fund (see page 224), are distributed amongst the Roads Funds. The Developmental Roads Fund received, from 1st December, 1929, to 14th May, 1942, one-ninth of the total proceeds (that is, the additional yield obtained by an increase of  $12\frac{1}{2}$  per cent. in the rates on the earlier date mentioned) and was required to pay annually £5,000 to the Cumberland Main Roads Fund, and £52,000 to the Country Main Roads Fund. This arrangement was terminated when the rates of tax were reduced by approximately 20 per cent., as from 5th May, 1942. The proceeds of the tax (less the amount payable to the Public Vehicles Fund) have since been distributed between the Cumberland and Country Main Roads Funds. The tax on vehicles owned by residents of the metropolitan district is apportioned in equal shares between these two funds, and the Country Main Roads Fund receives the tax on motor vehicles registered in the country.

The councils in the metropolitan road district, except the City of Sydney, may be required to contribute to the County of Cumberland Main Roads Fund at a rate not exceeding  $\frac{1}{2}$ d. in the £ on the unimproved capital value of ratable property. The maximum rate was fixed at  $\frac{1}{2}$ d. in the £ for the years 1925 to 1932 inclusive, and then reduced to  $\frac{7}{16}$ d. The rate payable in respect of land used for agricultural and pastoral purposes is one-half the rate levied on other lands in the district. The rate in the City of Sydney was also one-half the ordinary rate until this area was exempted as from 1st January, 1938.

Contributions by country councils to the Country Main Roads Fund depend upon the amount expended on the main roads, the maximum in any year being the sum equal to a rate of  $\frac{1}{2}$ d. in the £ on the unimproved capital value of ratable property. Usually contributions by country councils are not paid to the Department's funds as in the case of metropolitan councils, but are applied directly in meeting the councils' share of the cost of works.

The Main Roads Funds are expended on the construction and maintenance of main roads in the respective districts, and on administrative expenses and loan charges, including interest, exchange, sinking fund and management.

In the metropolitan district, where the levy on councils is compulsory, the whole cost of construction and maintenance of main roads is paid from the funds of the Main Roads Department, but the actual work may be done by the councils.

In the country districts assistance in respect of road works may be granted by the Department to the council of any area through which a main road passes, and the council may be required to contribute part of the cost of the work as prescribed by the Act. The councils may pay a greater proportion of the cost than is prescribed, or in special circumstances, the whole cost of any particular work may be paid from the Roads Funds or the cost may be advanced to be repaid by the councils.

The proportion of the cost of works on country roads borne by the Department of Main Roads varies with the class of roads. Since 1st July, 1928, the Department has paid the whole cost of works on State highways in the country, at least two-thirds of the expenditure on trunk roads, and half the cost on ordinary main roads; from 1st July, 1936, these proportions were increased to three-quarters in respect of trunk roads and two-thirds for ordinary main roads. Since 1st November, 1932, the Department has paid in addition, the whole cost of bridges over 20 feet span on trunk roads and three-fourths of the cost of bridges on ordinary main roads.

The cost of constructing developmental roads and works is borne in full by the Main Roads Department but local councils are required to maintain them in satisfactory condition. Under early provisions of the law, councils were required also to pay interest for a period of twenty years on loans expended on developmental roads. They were released from the obligation to pay interest on new loan expenditure subsequent to 30th June, 1928, and their liability in respect of loans expended up to 30th June, 1928, ceased as from 1st July, 1935.

Loan charges on the whole amount of their loan indebtedness to the State Treasury are debited to the two Main Roads Funds. Until 30th June, 1933, liability in respect of loan debt incurred up to 30th June, 1928, was limited to one-half in the County of Cumberland and to such amount in respect of country main roads as was repayable by councils.

Until 1st July, 1933, the Developmental Roads Fund was debited with such loan charges as were collected from councils; from this date to the end of 1935 it was liable for all charges on loan debt incurred up to 30th June, 1931. Then it was freed from liability on loans until 1st December, 1939. Subsequently, until 30th June, 1942, the Fund was debited with charges on all loans expended on developmental roads and works; since 1942-43 the charges have been paid from Consolidated Revenue Fund.

*Commonwealth Grants for Main Roads.*

Since 1923-24, funds have been provided by the Commonwealth to assist the States in the construction and upkeep of roads. Up to 30th June, 1926, payments to the States were made from a trust fund (to which appropriations were credited) as expenditure approved by the Commonwealth was incurred. Subsequently, annual grants were made in terms of agreements under the Federal Aid Roads Act. Particulars of the agreements covering periods up to 30th June, 1937, were published in previous issues of the Year Book.

Under the agreement which covered the ten years ended 30th June, 1947, the Commonwealth provided each year an amount equivalent to 3d. per gallon of the customs duties on imported petrol and 2d. per gallon of excise duties on locally refined petrol (including certain petrol substitutes). Of each year's total Tasmania received 5 per cent. and the balance was allocated to the other States on a basis of three-fifths population and two-fifths area. From the grants made monthly, the Commonwealth retained State sinking fund contribution at the rate of  $2\frac{1}{2}$  per cent. per annum on State loan expenditure under the original agreement.

The agreement provided that the States might expend the equivalent of up to  $\frac{1}{2}$ d. per gallon of petrol on works (other than roads) connected with transport, and of that sum they might be required to expend one-twelfth in maintaining roads of access to Commonwealth properties.

The Commonwealth Aid Roads and Works Act, 1947, provides for the following sums to be paid into the Aid Roads and Works Trust Account during the three years commencing 1st July, 1947, to be spent on the purposes specified and in accordance with a policy approved by the Commonwealth Minister for Transport:—

- (i) A sum equivalent to 3d. per gallon of customs duties on petrol and 2d. per gallon of excise duties on locally refined petrol and certain petrol substitutes (excluding any duties on aviation fuel), to be distributed annually among the States in the same proportions as previously, for the construction and maintenance of roads. Of this grant not more than one-sixth may be spent on works connected with transport other than roads;
- (ii) £1,000,000 to be distributed annually among the States in the same proportions for roads in sparsely settled areas, or for the purchase of road-making plant beyond the resources of local authorities;
- (iii) £500,000 per annum to be applied by the Commonwealth to strategic roads and roads of access to Commonwealth property.
- (iv) £100,000 for the promotion of road safety throughout the Commonwealth.

Since June, 1931, the amounts received by New South Wales under the Federal Aid Roads Act have been apportioned between the County of Cumberland and Country Main Roads Funds in the same ratio as the receipts from State motor taxation.

*Main Roads Funds—Receipts and Payments.*

The accounts of the Main Roads Department were presented on an "income and expenditure" basis to 1940-41 and on a "receipts and payments" basis thereafter, and they include particulars of the extensive defence works constructed by the Department in New South Wales and elsewhere, mainly from Commonwealth funds. The accounts of the last six years are summarised below.

TABLE 147.—Main Roads Department, Aggregate Receipts and Payments, 1940-41 to 1945-46.

Particulars.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
<i>Receipts.</i>						
Motor Taxes, Fees, etc. ...	£ 2,193,856	£ 1,879,297	£ 1,644,120	£ 1,758,057	£ 1,845,377	£ 2,024,947
Contributions by Councils	242,474	221,085	242,052	237,972	242,021	222,097
State Appropriations—						
From Revenue ...	809,375	383,633	(-) 1,461	(-) 2,320	(-) 4,830	1,007
From Loans ...	160,692	120,514	50,000	...	...	300,000
Defence Works...	879,248	523,900	...	...	...	...
Federal Appropriations—						
Petrol Tax ...	956,352	599,294	410,031	143,958	536,509	873,425
Defence Works...	160,420	1,220,708	3,776,425	2,033,340	633,312	77,337
Miscellaneous ...	79,883	99,790	193,821	215,855	210,349	141,082
Total ...	£ 5,482,300	5,048,311	6,344,994	4,386,862	3,462,738	3,630,895
<i>Payments.</i>						
Roads in New South Wales—						
Construction ...	2,909,998	1,811,078	596,302	465,097	444,164	561,185
Maintenance ...	1,454,246	1,293,451	1,121,456	1,552,390	1,609,678	1,811,500
Defence Works (New South Wales and elsewhere)	153,992	1,126,398	3,717,719	1,343,043	989,003	186,327
Loans—						
Repayments and Sinking Fund ...	181,204	159,095	129,735	150,234	101,940	97,495
Interest ...	202,507	215,211	156,698	144,650	142,422	133,351
Exchange and Management ...	34,081	29,782	21,801	20,022	21,234	18,778
Administrative Expenses	107,178	108,013	115,818	114,846	119,241	138,199
Miscellaneous ...	18,347	115,001	118,858	62,360	92,986	399,019
Total ...	£ 5,061,553	4,858,029	5,978,387	3,852,642	3,521,268	3,345,854

The chief sources of funds have been motor taxation and grants from petrol tax and the largest receipts in any year from these items were motor taxes £2,193,856 in 1940-41, and petrol tax £1,229,230 in 1939-40. Petrol tax receivable from the Commonwealth in the months November, 1943, to July, 1944, was remitted by the State to assist the Commonwealth war finances, hence the receipts in 1943-44 were applicable to only four months and those in 1944-45 to eleven months.

Total receipts of the Main Roads Department in the twenty-one years since its inception to 30th June, 1946, were approximately £68,200,000, excluding £8,200,000 provided by the Commonwealth Government for defence works. Motor taxes £33,816,000 represented 50 per cent. of the net total; petrol tax was £14,106,000 or 21 per cent., contributions by councils £5,902,000 or 9 per cent. and State appropriations £11,915,000 or 17 per

cent. The aggregate cost of works on roads and bridges in New South Wales was £56,910,000, comprising construction £31,135,000 and maintenance £25,775,000; administrative expenses totalled £1,856,000, interest and exchange on debt £3,380,000, and debt repayment £3,248,000.

The main items of receipts and payments of each of the Roads Funds during the last three years are shown in the following statement:—

TABLE 148.—Main Roads Department—Receipts and Payments, Various Funds, 1943-44 to 1945-46.

Year ended 30th June.	Receipts.				Payments.			
	State Motor Taxation.	Federal Aid : Petrol Tax.	Councils' Contribution.	State Loan Vote.	Roads in N.S.W.		Debt Charges.	
					Con- struction.	Mainten- ance.	Interest, Exchange.	Repay- ment.
County of Cumberland Main Roads Fund.								
1944	£ 412,299	£ 33,830	£ 232,933	£ ...	£ 114,189	£ 270,913	£ 37,472	£ 67,698
1945	416,439	126,080	235,723	...	118,002	253,314	35,881	37,849
1946	454,380	205,255	216,884	...	195,491	293,699	32,749	34,376
Country Main Roads Fund.								
1944	£ 1,345,758	£ 110,128	£ 5,039	£ ...	£ 341,410	£ 1,281,477	£ 127,200	£ 82,536
1945	1,428,938	410,429	5,798	...	312,002	1,356,364	127,775	64,091
1946	1,570,567	668,170	5,213	250,000	335,417	1,512,801	119,380	63,119
Developmental Roads Fund.								
1944	£ ...	£ ...	£ ...	£ ...	£ 9,498	£ ...	£ ...	£ ...
1945	...	...	500	...	13,560	...	...	...
1946	...	...	...	50,000	30,277	...	...	...
Total, All Funds.								
1944	£ 1,758,057	£ 143,958	£ 237,972	£ ...	£ 465,097	£ 1,552,390	£ 164,672	£ 150,234
1945	1,845,377	536,509	242,021	...	444,164	1,609,678	163,656	101,940
1946	2,024,947	873,425	222,097	300,000	561,185	1,811,500	152,129	97,495

Of the motor taxes, fees, etc., paid to the Main Roads Department, the County of Cumberland Main Roads Fund received 23.5 per cent. in 1943-44, 22.6 per cent. in 1944-45 and 22.4 per cent. in 1945-46; the proportions received by the Country Main Roads Fund were 76.5 per cent., 77.4 per cent. and 77.6 per cent. in the respective years. The Cumberland Fund has received 23.5 per cent. of the Federal grant from petrol tax and the Country Fund 76.5 per cent. in recent years.

Expenditure from the various funds of the Main Roads Department on construction and maintenance of roads and bridges in New South Wales to 30th June, 1946, is shown in the following statement; expenditure of Federal Aid Roads moneys between July, 1927, and June, 1934, has been allocated in the table to existing funds, according to the class of roads on which the moneys were expended.



TABLE 149.—Main Roads Department—Expenditure on Construction and Maintenance of Roads in N.S.W. to 30th June, 1946.

Period.	Cumberland Main Roads.		Country Main Roads.		Developmental Roads—Construction.	Total, All Funds.	
	Construction.	Maintenance.	Construction.	Maintenance.		Construction.	Maintenance.
	£	£	£	£	£	£	£
1925-26 to 1929-30	3,473,200	1,038,656	5,952,137	3,044,333	1,169,997	10,595,334	4,082,989
1930-31 to 1934-35	1,271,263	1,192,364	3,202,695	4,172,724	*697,901	5,170,491	5,366,456
1935-36 ...	281,175	246,254	648,799	1,122,135	*172,431	1,102,219	1,368,575
1936-37 ...	259,297	281,002	990,797	1,288,717	98,445	1,348,539	1,569,719
1937-38 ...	431,347	299,983	1,181,485	1,183,636	83,325	1,696,157	1,483,619
1938-39 ...	504,668	286,474	1,129,741	1,233,455	102,489	1,736,898	1,519,929
1939-40 ...	822,558	281,420	1,725,624	1,259,325	149,901	2,698,083	1,540,745
1940-41 ...	902,312	261,888	1,836,296	1,192,358	171,390	2,909,998	1,454,246
1941-42 ...	654,381	218,235	1,071,365	1,075,216	85,332	1,811,078	1,293,451
1942-43 ...	156,867	195,958	422,542	925,498	16,893	596,302	1,121,456
1943-44 ...	114,189	270,913	341,410	1,281,477	9,498	465,097	1,552,390
1944-45 ...	118,002	253,314	312,602	1,356,364	13,560	444,164	1,609,678
1945-46 ...	195,491	298,699	335,417	1,512,801	30,277	561,185	1,811,500
Total to 30-6-46...	9,184,750	5,125,160	19,150,910	20,648,039	2,801,439	31,135,545	25,774,753

\* Includes maintenance of developmental roads £1,368 in 1930-31 to 1934-35, £186 in 1935-36, Total, £1,554.

## BRIDGES AND FERRIES.

Nearly all the large bridges of recent date have been constructed of iron and steel and reinforced concrete, and some of them have been erected under difficult engineering conditions, owing to the peculiarity of the river flow in certain parts of the country. The municipal and shire councils are empowered to control the bridges, with the exception of those under the control of the Main Roads Department. The most notable bridge-building project is the Sydney Harbour Bridge described below.

Tolls are charged on the George's River bridge, built by the Sutherland Shire Council, the Parramatta River bridge, built by the Ryde Municipal Council, and the Peat's Ferry bridge, built by the Main Roads Department. The last-named carries the Pacific Highway across the Hawkesbury River, replacing the ferry service formerly operated at the site.

The tolls collected in respect of these bridges in 1939 and recent years were as follows:—

Bridge.	1939.	1941.	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£	£	£
George's River* ...	40,353	27,611	15,540	14,953	16,667	22,020	39,513
Parramatta River* ...	16,048	10,531	6,685	6,237	6,783	9,221	16,408
Peat's Ferry† ...	...	...	...	...	...	2,258	21,997

\* Calendar year.

† Year ended 30th June.

Where local conditions and limited traffic have not favoured the erection of a bridge, a punt or ferry has been installed. The principal ferries, which are worked otherwise than by hand, are operated free of charge to the public, but the Government makes a small grant annually to compensate municipal and shire councils for revenue lost by the abolition of tolls in 1908. The Stockton Ferry, operated across the Hunter River at Newcastle by the Main Roads Department, is an exception. The tolls collected were

£1,822 in 1943-44, £2,204 in 1944-45 and £3,030 in 1945-46. Tolls collected by the Department for the Peat's Ferry service (discontinued upon opening of the bridge) were £7,624 in 1943-44 and £7,475 in 1944-45 (to 4th May).

### *Sydney Harbour Bridge.*

The Sydney Harbour Bridge, crossing between Dawes Point on the southern and Milson's Point on the northern side, is the largest arch bridge in the world. Its total length, with railway and roadway approaches, is 2½ miles. The railway across the bridge connects the City Railway at Wynward Station and the northern suburban line at Waverton Station. The bridge was opened for traffic on 19th March, 1932. Its administration is vested in the Department of Main Roads.

The main bridge consists of a steel arch span of 1,650 feet, with a rise of 350 feet at the centre of the lower chord at crown, and the highest point of the top chord is 440 feet above mean sea level. It is flanked on either side by granite-faced concrete abutment towers and pylons and by five steel approach spans. The clearance for shipping is 170 feet from high-water level. The width of the deck overall is 160 feet; it carries a roadway 57 feet wide in the centre, with a pair of railway tracks on each side, and a footway 10 feet wide on each extreme outside. The main arch is composed of silicon steel and the deck of carbon steel. The weight of steelwork in the bridge is 51,990 tons, of which 36,860 tons are in the main span.

The total capital cost of the bridge to 30th June, 1946, was £9,746,329, of which £8,066,395 was expended from loan funds, but the final cost will probably approximate £9,600,000 upon realisation of surplus resumed lands.

Tolls are charged for traffic other than pedestrian, and the railway, tramway and omnibus authorities pay prescribed amounts in respect of paying passengers carried across the bridge. Part of the cost of the bridge was met by a special levy on land in adjacent local areas; the levy was abolished at the end of 1937.

The charges payable in respect of vehicular traffic across the bridge (other than railway and tramway traffic) are shown below.

	s.	d.
Motor cars and motor cycles with side cars ... .. each	0	6
Bicycles, tricycles, motor cycles without side cars, light vehicles propelled by hand or horse drawn ... .. „	0	3
Vans, lorries, drays, or other vehicles of which the tare weight does not exceed 2 tons ... .. „	0	9
Vans, lorries, drays, or other vehicles of which the tare weight exceeds 2 tons, but does not exceed 3 tons. ... .. „	1	6
Vehicles over 3 tons tare weight ... .. „	2	0
Persons aged 14 years and over, riding in vehicles (other than the driver) ... .. „	0	3

One pair of railway tracks is used for trams. The tram fare for the Bridge section was reduced from 4d. to 3d. per adult passenger on 1st October, 1932, and to 2d. on 1st January, 1939; the fare for children was 2d. until 1st January, 1939, and 1d. thereafter. Motor omnibus services were extended across the bridge on 1st August, 1937; the fares are the same as for tram passengers.

Road tolls and contributions for railway and tramway passengers and by councils are paid into the Bridge Account. The income and expenditure in 1938-39 and in each of the last five years are shown below:—

TABLE 150.—Sydney Harbour Bridge, Income and Expenditure, 1938-39 to 1945-46.

Particulars.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Income—	£	£	£	£	£	£
Road Tolls ... ..	278,297	165,654	126,411	131,156	150,370	225,554
Railway Tolls ... ..	103,697	98,821	111,336	116,184	119,253	134,005
Tramway Tolls ... ..	33,991	16,545	17,822	18,971	19,165	18,955
Omnibus Tolls ... ..	4,746	6,913	6,582	5,914	6,236	6,592
Other ... ..	8,367	8,276	8,810	9,010	7,518	8,621
Total Income ... ..	£ 429,098	296,209	270,961	281,235	302,542	393,727
Expenditure—						
Maintenance ... ..	36,739	28,227	25,485	24,135	24,889	32,013
Collection of Road Tolls ...	10,520	10,111	9,400	9,553	9,931	11,411
Loan Charges—						
Interest ... ..	294,748	285,638	279,452	274,466	275,487	271,430
Exchange ... ..	38,454	39,155	38,418	38,409	38,436	36,787
Management ... ..	1,596	1,386	1,554	788	1,377	1,070
Sinking Fund ... ..	40,563	49,173	52,279	55,096	65,465	66,908
Other ... ..	1,674	21,678	17,132	10,321	4,291	1,888
Total Expenditure ... ..	£ 424,294	435,368	423,720	412,768	419,876	421,207
Deficiency ... ..	4,804*	139,159	152,759	131,533	117,334	27,480

\* Surplus.

The Bridge Account had a credit balance of £94,059 at 30th June, 1939, but deficiencies in each year 1939-40 to 1945-46 aggregated £639,300 and at 30th June, 1946, the net accumulated deficiency was £545,291. The regression was due to war-time restrictions upon motor traffic; the income from road tolls averaged only £143,400 per annum in the four years ended June, 1945, or 52 per cent. of that of 1938-39. In 1945-46 there were increases of £75,184 from road tolls and £14,752 from railway tolls and the deficiency was less than one-fourth that of the preceding year.

#### EXPENDITURE ON ROADS, BRIDGES, ETC.

Moneys expended on roads in New South Wales are disbursed for the most part by the Department of Main Roads and the councils of municipalities and shires, but some road works have been constructed by other Governmental departments and bodies—especially for the relief of unemployment.

It is difficult to determine the annual aggregate expenditure on roads and bridges and that of each authority without duplication or omission. This is so because various authorities frequently undertake road works in association with or as agent for others and expend moneys provided as grants or loans by other authorities. Furthermore, expenditure on road works has not been distinguished clearly in some cases when these works were subsidiary to the designated purpose for which funds were voted and expended. This was especially the case in regard to the large sums expended annually on unemployment relief works between 1930-31 and 1941-42.

The particulars given in the following table, therefore, are to be regarded as approximate, especially the amounts classified as "other" expenditure by the State Government. The expenditure on construction, maintenance and direct administration from revenue and loans is included, but not debt charges (interest or repayment) on loans. Where the State Government or Departments have paid for works constructed by councils the expenditure is classified under the heading "State Government," and the expenditure classified as "Local Government" represents the approximate expenditure from revenue and loans raised by the councils.

TABLE 151.—Total Expenditure on Roads, Streets and Bridges in New South Wales, 1933 to 1946.

Year ended 30th June.	State Government.		Local Government (Municipalities and Shires.)*	Total.
	Main Roads Department.	Other.		
	£	£	£	£
1933 ... ..	2,026,227	584,618	1,964,733	4,575,578
1934 ... ..	2,215,741	1,562,618	1,837,102	5,615,461
1935 ... ..	2,758,653	2,115,765	1,879,644	6,754,062
1936 ... ..	2,552,580	2,082,645	2,071,576	6,706,861
1937 ... ..	3,005,649	1,401,421	2,359,104	6,766,174
1938 ... ..	3,281,898	1,457,751	3,397,590	8,137,239
1939 ... ..	3,358,324	2,019,138	3,516,637	8,894,099
1940 ... ..	4,346,905	1,352,047	2,831,486	8,530,438
1941 ... ..	4,471,422	544,549	2,650,543	7,666,514
1942 ... ..	3,212,542	256,079	2,375,275†	5,844,496†
1943 ... ..	1,833,576	319,824	1,461,102†	3,614,502†
1944 ... ..	2,132,333	337,380	1,781,593†	4,251,306†
1945 ... ..	2,173,083	303,314	2,129,792	4,606,189
1946 ... ..	2,510,884	372,897	2,367,857	5,251,638

\* Calendar year ended six months earlier.

† Subject to revision.

Expenditure on the Sydney Harbour Bridge is not included in the table.

## RAILWAYS, TRAMWAYS AND OMNIBUSES.

The total length of railways open for traffic in New South Wales at 30th June, 1946, was 6,456 miles, including 6,128 miles of line vested in the Railways Commissioner of New South Wales; a line 2 miles long from Liverpool to Holdsworthy owned by the Federal Government; 241 miles of border railways in the Riverina district owned by the State of Victoria and 85 miles of private railways available for general traffic. The length of State railways laid with one or more tracks is shown in Table 153.

### STATE RAILWAYS.

Administrative authority for the control of the State railways is vested in a Commissioner for Railways, appointed for seven years, and there is an assistant commissioner to exercise such powers and charged with such duties as the Commissioner may determine.

The railway property vested in the Railways Commissioner as a body corporate to conduct the services on existing lines and to construct the new lines authorised by the Legislature. By-laws for the regulation of the services, including those by which rates of freight and fares are prescribed, must be approved by the Government before they become operative.

The Government Tourist Bureau and tourist resorts were administered by the Commissioner for Railways from 1st January, 1938, to 9th May, 1946, when they were transferred to the control of the Minister for Tourist Activities and Immigration. The finances of these undertakings were not included in the railway accounts.

The receipts from the railway services are paid into the Government Railways Fund, and expenditure from the Fund for operation of the services is subject to Parliamentary appropriation. Loan funds for construction, improvements, etc., are provided by Parliament from the General Loan Account of the State.

Within the Government Railways Fund a special reserve was established as at 1st July, 1945, with a balance of £9,860,730, comprising the residue of sums set aside between 1940-41 and 1944-45 for deferred maintenance, holiday commitments and other purposes. Parliament may appropriate to the Special Reserve Account further sums from the Government Railways Fund, and with its approval the Reserve may be used for maintenance deferred in previous years, for renewals, reconstruction, conversions of assets, special works of maintenance and for other special expenditure not chargeable to working expenses.

Interest, sinking fund and exchange on the railways loan debt is a charge on the Government Railways Fund; the annual sum payable is that part of the debt charges of the State which corresponds to the ratio between the railways loan debt and the total public debt of New South Wales.

The charge for exchange was imposed for the first time in 1930-31, following depreciation of the Australian currency. A contribution for sinking fund was not charged until 1st October, 1937.

Provision was made in 1928 for annual contribution from State revenues to make good two-thirds of the loss incurred on country developmental railways, the amount of contribution not to exceed £800,000 in any year. The maximum amount of £800,000 was paid in 1928-29 and each succeeding year.

The construction of new railways is authorised by Parliament and the order of construction and rate of progress are determined by the Commissioner. Interest on lines under construction may be added to the capital cost.

Particulars regarding the finances of the railways and tramways in relation to the finances of the State are published in the chapter of this volume entitled "Public Finance."

#### *War-time Control of Railways.*

During the war (1939-45) the Commonwealth Government exercised certain powers of control over the State railways under the National Security Act. A War Railway Committee, representing Commonwealth and State railway authorities, was established on 3rd December, 1941, and a Land Transport Board with powers over both road and rail transport was formed on 25th March, 1942. In March, 1944, control was transferred from the Board to the Commonwealth Minister for Transport.

Under these powers special rates and fares for defence traffic were fixed and interstate movements of passengers and goods were restricted. Commonwealth control ceased in August, 1945.

#### LENGTH OF STATE RAILWAYS.

The statistics of State railways shown in this chapter refer to the lines vested in the Railways Commissioner of New South Wales.

The first railway line, 14 miles in length, was opened for traffic between Sydney and Parramatta on 26th September, 1855, and communication was established between Newcastle and East Maitland on 30th March, 1857.

The total length of the lines open at 30th June, 1946, was 6,128 miles, distributed as follows:—Southern system, 2,188 miles; Western, 2,194 miles; and Northern, 1,746 miles. In addition there were 1,424 miles of sidings and crossovers.

The growth of the State railway system is illustrated in the following table:—

TABLE 152.—Railways, Lines Open and Capital Cost, 1855 to 1946.

Period.*	Lines opened for traffic during the period.	Lines open for traffic at end of period.			Capital expenditure on lines open for traffic—†	
		Total length.	Population per mile.	Area per mile.	Increase during period.	Total at end of period.
	Miles.	Miles.	No.	Sq. miles.	£	£
1855-64 ...	143	143	2,789	2,170	2,631,790	2,631,790
1865-74 ...	260	403	1,427	770	4,212,756	6,844,546
1875-84 ...	1,215	1,618	559	192	13,235,592	20,080,138
1885-94 ...	883	2,501	490	124	15,775,133	35,855,271
1895-1904	780	3,281	435	95	6,433,246	42,288,517
1905-14 ...	686	3,967	472	78	18,976,352	61,264,869
1915-24 ...	1,556	5,523	406	56	32,090,298	93,355,167
1925-34 ...	641	6,164	425	50	47,578,154	140,933,321
1935-44 ...	(-) 36	6,128	449	50	11,211,347	152,144,668
1945 ...	...	6,128	473	50	955,152	153,099,820
1946 ...	...	6,128	477	50	1,876,195	154,976,015

\* Calendar years to end of 1887, later years ended 30th June. (-) Lines dismantled.

† Includes expenditure on workshops, rolling stock, etc.

Rail transport facilities have been extended not only by the construction of new railways but also by the laying of additional tracks on existing lines and by facilities for speedier transport such as electrification, to which much of the capital expenditure in the period 1925 to 1934 was applied.

Work is proceeding on a line from Maryvale to Sandy Hollow (150 miles). This line has special strategic importance as it will provide the only direct route, alternative to that through Sydney, between the southern States and Queensland. It will link the north-western portion of the State directly by rail with the port of Newcastle. Expenditure on the line to 30th June, 1946, was £1,851,136.

The following statement shows the length of lines laid with one or more tracks at intervals since 30th June, 1901:—

TABLE 153.—Railways, Length and Classification of Tracks, 1901 to 1946.

At 30th June.	Single.	Double.	Triple.	Quadruple.	Sextuple.	Total.
	miles.	miles.	miles.	miles.	miles.	miles.
1901 ... ..	2,678	158½	...	8½	...	2,845
1911 ... ..	3,476½	276	...	8½	...	3,761
1921 ... ..	4,428	572	7½	34½	1*	5,043
1931 ... ..	5,381	612	8	35	8†	6,044
1941 ... ..	5,458	617	7	37	8†	6,127
1942 ... ..	5,445	630	7	37	8†	6,127
1943 to 1946 ...	5,426	650	7	37	8†	6,128

\*Five tracks.

†Includes 47 chains with eight tracks.

There has been no change in the classification of tracks since 1942-43.

There are duplicate lines on the main western line as far as Kelso and on two other sections between Kelso and Orange; the southern line is duplicated as far as Junee, the northern line as far as Branxton, and the south coast line to Port Kembla North, except certain tunnels and bridges.

Quadruplication of the main suburban and western lines between Lidcombe and Penrith is in progress.

#### *New Hawkesbury River Railway Bridge.*

A new railway bridge, designed and built by the Department of Railways, spans the Hawkesbury River and was opened on 1st July, 1946. Its construction began in July, 1939, and continued throughout the war years. The new bridge carries double tracks and has eight spans, two of 445 feet 8 inches, four of 347 feet 6 inches and two of 147 feet. With five deep piers founded in sand in depths ranging from 178 feet to 183 feet 7 inches, the overall length of the bridge is 2,764 feet. There are 7,900 tons of steel in the superstructure. Up to 30th June, 1946, the expenditure on the bridge was £2,103,904.

#### *City and Suburban Electric Railways.*

The city electric railway, when complete, will form a two-track loop railway around the city, running, for the most part underground, along the eastern side of the city to Circular Quay and returning along the western side to the Central Station. The scheme includes the construction of

branches from the city railway to the eastern, south-eastern and southern suburbs. An Act authorising the construction of these branches was assented to on 27th March, 1947. Preliminary surveys for these lines were made during 1945-46.

The eastern section of the city railway was completed as far as St. James Station, about a mile from Central Station, in December, 1926, and the western section was opened for traffic between Central and Wynyard Stations—approximately  $1\frac{1}{2}$  miles—in February, 1932. Suburban services along the main western, southern and northern lines were connected with the North Sydney line by the opening of the Sydney Harbour Bridge in March, 1932.

The suburban railways are for the most part operated by electricity; the total length of the lines under the electric system at 30th June, 1946, was 110 miles 32 chains, as shown below. Nearly all these lines are laid with at least two tracks, 21 miles being laid with four tracks or more.

TABLE 154.—Electric Railways, Length, 30th June, 1946.

Line.	Length of Route.		Line.	Length of Route.	
	miles.	chns.		miles.	chns.
City Railway ... ..	2	45	Southern—		
Illawarra—			Lidcombe to Cabramatta	7	7
Sydney to National Park...	17	57	Granville to Liverpool ...	9	15
Sydenham to Bankstown...	8	33	Warwick Farm Racecourse	1	1
Tempe to East Hills	10	38	Regents Park to		
Sutherland to Cronulla ...	6	25	Bankstown ... ..	2	53
Western—			Sefton Park East to		
Sydney to Parramatta ...	14	60	North Junction...	0	31
Clyde-Rosehill Racecourse	1	16	North Shore Line	14	38
Northern—					
Strathfield to Hornsby ...	14	13	Total ... ..	110	32

#### COST OF STATE RAILWAYS.

The total capital expenditure on lines open for traffic as at 30th June, 1946, amounted to £154,976,015, excluding the cost of the line,  $2\frac{1}{2}$  miles in length, from Wynyard across the Sydney Harbour Bridge to Waverton. The cost of construction was £106,440,528, and the expenditure on rolling stock and other equipment £48,535,487, viz.: rolling stock, £29,294,615; electric power stations, substations and plant, £10,930,985; machinery, £2,872,788; workshops, £3,017,999; reconditioning of track, £544,100; other items, £1,875,000.

The average cost of the railways per mile open for traffic at 30th June, 1946, was £25,302 for construction, rolling stock and other equipment, including £17,378 for construction. The cost of construction varies greatly according to the class of traffic for which the lines are constructed, the number of tracks laid, and the physical characteristics of the territory through which they run.

Of £154,976,015 expended to 30th June, 1946, an amount of £666,864 was provided from consolidated revenue, and £544,100 represented the unrepaid balance of an interest-free advance of £3,300,000 made by the Treasury in 1934-38 for reconditioning railway tracks and rolling stock, repayable



in annual instalments of £165,000 over a period of twenty years, ending in 1954-55. Repayments during the war years exceeded requirements by £1,155,000 but no repayment was made in 1945-46.

## FINANCES OF STATE RAILWAYS.

State railways are regarded as a developmental agency in the settlement of the country rather than as a revenue-producing enterprise, and services on a number of lines are conducted at a loss. In addition, railway finances bear the burden of substantial concessions made for the direct benefit of primary and secondary industries. These include rebates from ordinary charges for the transport of livestock and fodder, and concessions in respect of the carriage of raw materials and the products of certain manufacturing industries which are assisted for national reasons.

The value of concessions borne by the railways in the carriage of livestock and goods amounted to £500,971 in 1944-45 and 503,173 in 1945-46, and further concessions were borne by State revenues.

The capital cost of railways open for traffic, capital debt charges and final net results of operations in various years since 1920-21 are shown in the following table. The charge for sinking fund is the full amount of the contribution payable in each year to the State Treasury. Hitherto in the Year Book (as in the railway accounts) part of the charge for sinking fund has been included in working expenses for the retirement of assets.

TABLE 155.—Railways, Capital Charges and Net Earnings,  
1920-21 to 1945-46.

Year ended 30th June.	Capital Expended on Lines open to end of year. *	Net Earnings and Annual State Contribution. †	Capital Charges.				Surplus.
			Interest.	Exchange and Loan Management.	Sinking Fund. ‡	Total.	
	£000.	£	£	£	£	£	£
1921 ...	82,304	3,234,528	3,811,560	...	...	3,811,560	(-) 577,032
1929 ...	124,329	5,437,566	6,150,000	...	...	6,150,000	(-) 712,434
1931 ...	132,565	3,163,408	6,790,082	794,946	...	7,585,028	(-) 4,421,620
1938 ...	146,808	6,685,781	5,340,000	764,312	530,000	6,634,312	51,469
1939 ...	147,618	5,654,276	5,360,000	718,798	747,000	6,825,798	(-) 1,171,522
1940 ...	149,204	6,424,250	5,350,000	718,083	800,000	6,868,083	(-) 443,833
1941 ...	149,576	7,273,596	5,389,460	776,335	871,850	7,037,645	235,951
1942 ...	150,661	7,294,251	5,389,116	764,517	936,719	7,090,352	203,899
1943 ...	151,850	7,879,165	5,350,000	779,623	975,000	7,104,623	774,542
1944 ...	152,145	7,925,585	5,328,400	755,131	1,088,060	7,171,531	754,054
1945 ...	153,100	7,833,511	5,350,000	786,608	1,152,000	7,288,608	544,903
1946 ...	154,976	7,426,262	5,240,000	741,674	1,295,000	7,276,674	149,583

\* Includes capital expenditure on workshops, rolling stock, etc. † Includes annual contribution of £800,000 from Treasury since 1928-29. (—) Deficit. ‡ See explanation in text preceding table.

Railway finances were recovering from adverse effects of depression when rising costs and an unfavourable season caused a temporary set-back in 1938-39. Fares and freights were raised in March, 1939, and results improved progressively (despite difficulties caused by a prolonged industrial

dispute in coal mining in 1939-40) until 1942-43 when there was a record surplus of £774,542, after all capital charges had been met and £5,214,000. had been provided for special charges (see Table 156). A sharp rise in working expenses occurred during the war years; war traffic diminished and gross earnings declined after 1943-44, and in 1945-46 the net surplus decreased to £149,588, although in that year no special charges were met.

In 1945-46 capital charges, comprising interest, exchange, loan management, and sinking fund, absorbed 23.2 per cent. of gross earnings (excluding the Treasury contribution of £800,000). The proportion in 1944-45 was 23.1 per cent.

Since 1937-38 the working expenses have included repayments of the interest-free loan from the Treasury (referred to on page 194), and from 1940-41, reserves for deferred maintenance, etc. (see page 197). A statement of earnings and working expenses at intervals since 1920-21 appears hereunder:—

TABLE 156.—Railways, Gross Earnings and Working Expenses, 1920-21 to 1945-46.

Year Ended 30th June.	Gross Earnings (excluding State Contribution).	Working Expenses and Special Charges.				Net Earnings before meeting Capital Charges.
		Working Expenses.	Repayments of Loan for Reconditioning Track.	Reserve Provisions.	Total.	
	£	£	£	£	£	£
1921 ...	14,267,205	11,032,677	...	...	11,032,677	3,234,528
1929 ...	19,615,616	14,978,050	...	...	14,978,050	4,637,566
1931 ...	15,205,741	12,842,333	...	...	12,842,333	2,363,408
1938 ...	19,486,116	13,463,235	137,100	...	13,600,335	5,885,781
1939 ...	19,146,441	14,127,165	165,000	...	14,292,165	4,854,276
1940 ...	19,954,851	14,165,601	165,000	...	14,330,601	5,624,250
1941 ...	23,215,610	15,527,014	495,000	720,000	16,742,014	6,473,596
1942 ...	27,636,332	18,421,081	495,000	2,276,000	21,192,081	6,494,251
1943 ...	34,071,958	21,778,793	330,000	4,884,000	26,992,793	7,079,165
1944 ...	34,501,192	23,860,607	495,000	3,020,000	27,375,607	7,125,585
1945 ...	31,577,137	23,543,626	330,000	670,000	24,543,626	7,033,511
1946 ...	31,313,410	24,687,148	...	...	24,687,148	6,626,262

Gross earnings increased by 80.2 per cent. between 1938-39 and 1943-44 when a record level was reached. Factors in the increase were the higher fares and freight rates charged from March, 1939, the expansion of traffic resulting from war services and war-time industrial activity and the restriction of motor transport and coastal shipping.

The proportion of working expenses to gross earnings, as shown in Table 156, and the percentage of net earnings on capital at intervals since 1920-21 are shown in the following table; the proportions here given differ from those published in the Commissioner's report because the figures on which these ratios are based do not include as working expenses certain sinking fund payments so charged in the departmental accounts.

TABLE 157.—Railways—Ratio of Working Expenses to Gross Earnings and Return on Capital, 1920-21 to 1945-46.\*

Year.	Proportion of Working Expenses to Earnings.		Proportion of Net Earnings to Capital Cost.	Year.	Proportion of Working Expenses to Earnings.		Proportion of Net Earnings to Capital Cost.
	Excluding Special Charges.	Including Special Charges.			Excluding Special Charges.	Including Special Charges.	
	per cent.	per cent.	per cent.		per cent.	per cent.	per cent.
1920-21 ...	77.3	77.3	3.93	1940-41 ...	66.9	72.1	4.33
1928-29 ...	76.4	76.4	3.82	1941-42 ...	66.5	76.6	4.31
1930-31 ...	84.5	84.5	1.80	1942-43 ...	63.9	79.2	4.66
1937-38 ...	69.1	70.0	4.09	1943-44 ...	69.1	79.4	4.68
1938-39 ...	73.8	74.6	3.29	1944-45 ...	74.5	77.7	4.60
1939-40 ...	71.0	71.8	3.77	1945-46 ...	78.8	78.8	4.28

\* See comment preceding table.

The high ratio of working expenses to the record earnings since 1940-41 reflects the special debits mentioned hereunder. The reserves for deferred maintenance, etc., and excess repayments of Treasury advance were equivalent to 10.1 per cent. of gross earnings in 1941-42, 15.3 per cent. in 1942-43, 10.3 per cent. in 1943-44, and 3.2 per cent. in 1944-45.

*Government Railways Fund—Special Reserve Account.*

In the years 1940-41 to 1944-45 large sums were transferred from revenue to the credit of reserve accounts and drawn upon for certain expenditures. These transactions were of doubtful legality and the Government Railways Act was amended in 1946 to validate them and, as at 1st July, 1945, to establish a Special Reserve Account, comprising the unexpended balances of the earlier reserves. Provisions governing the operation of the Special Reserve Account are described briefly on page 191.

The transfers from revenue, as shown in Table 156, included £190,000 for adjustment of stock values, and the remainder, totalling £11,380,000, comprised reserve provisions for accruing maintenance, £7,400,000, new rolling stock and equipment, £2,670,000, holiday pay, £1,200,000, and refreshment rooms, £110,000.

Expenditure from the total reserve provisions of £11,380,000 amounted to £1,519,270 in 1944-45, reducing the balance of reserves to £9,860,730 at 30th June, 1945. The expenditure comprised £348,084 on new rolling stock and £671,186 contributed to Consolidated Revenue Fund towards the repayment of Treasury Bills.

In 1945-46 expenditure amounted to £1,462,782; viz., new rolling stock and equipment £1,423,861 and accrued maintenance £38,921. The balance in the Special Reserve Account was £8,397,948 at 30th June, 1946.

## DISTRIBUTION OF EARNINGS AND EXPENSES.

A statement of the various items of earnings and working expenses of all lines in 1938-39 and the last five years is shown below. Against the respective items of working expenses in this dissection are included the special charges shown in Table 156, and debits for the retirement of assets which, in preceding tables, have been treated as part of the sinking fund contribution under capital charges.

TABLE 158.—Railways, Classification of Earnings and Expenses, 1938-39 to 1945-46.

Particulars.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
<i>Gross Earnings.</i>	£	£	£	£	£	£
Coaching ...	6,877,146	10,638,485	12,766,227	12,866,613	12,304,975	13,362,632
Goods ...	10,356,048	14,386,476	18,240,240	18,407,761	16,138,184	14,788,913
Refreshment-rooms	649,419	1,060,649	1,239,899	1,237,766	1,183,884	1,182,077
Sale of electricity ...	955,629	1,334,597	1,508,463	1,575,237	1,620,295	1,674,532
Miscellaneous ...	308,199	266,125	317,129	413,815	329,799	355,256
Total Earnings	£ 19,146,441	27,686,332	34,071,958	34,501,192	21,577,137	31,313,410
<i>Working Expenses.</i>						
Maintenance of way and works ...	2,971,814	4,481,912	6,700,380	5,948,028	4,696,631	4,731,450
Rolling stock—						
Maintenance ...	3,001,134	4,874,300	6,580,287	6,778,547	5,504,515	4,696,204
Motive power—						
Coal, etc. ...	721,289	1,219,957	1,527,473	1,594,460	1,487,816	1,497,924
Other ...	1,705,414	2,395,290	2,841,108	2,860,937	2,810,558	2,999,116
Other rolling stock ...	194,113	205,277	228,034	259,310	256,439	285,379
Transportation and traffic ...	3,501,654	4,414,275	5,198,019	5,598,451	5,439,972	5,926,074
Electrical ...	934,398	1,252,921	1,510,586	1,618,207	1,662,908	1,857,107
General charges and stores branch	559,374	865,548	684,092	771,211	821,348	842,490
Refreshment-rooms	646,290	1,020,147	1,188,519	1,189,385	1,149,256	1,140,998
Contribution to Superannuation Fund ...	307,500	379,000	333,000	377,000	466,000	554,000
Pay roll tax ...	...	296,495	336,682	405,258	377,649	402,932
War damage liability ...	...	307,438	214,925	134,549	117	...
	£ 14,542,980	21,712,560*	27,343,105*	27,535,343*	24,673,209	24,933,674
Less Assets retired	250,815	520,479	350,312	159,736	129,583	246,526
Total Net Working Expenses	£ 14,292,165	21,192,081	26,992,793	27,375,607	24,543,626	24,687,148
Net Earnings	£ 4,854,276	6,494,251	7,079,165	7,125,585	7,033,511	6,626,262

\* Inclusive of Special Reserve provisions (see Table 156), and also of Sinking Fund contribution, not distributable to items in detail.

During 1945-46 the earnings derived from the carriage of passengers, mails, parcels, represented 42.7 per cent. of the total; goods, 47.1 per cent.; refreshment rooms, 3.8 per cent.; sales of electricity to tramways, etc., 5.3 per cent.; and miscellaneous items, 1.1 per cent.

## COACHING AND GOODS TRAFFIC.

Statistics of train mileage and tonnage of livestock and details of the various classes of freight have not been compiled by the Department of

Railways since 1940-41, but particulars of passenger and goods traffic in various years from 1920-21 to 1940-41 are summarised below:—

TABLE 159.—Railways, Passenger and Goods Traffic,  
1920-21 to 1940-41.

Year ended 30th June.	Passenger Traffic.				Goods Traffic.			
	Train Mileage.	Number of Journeys.	Miles Travelled.	Amount received from Passengers.	Train Mileage.	Goods and Livestock Tonnage.	Ton Mileage.	Gross Earnings.
Thousands omitted.								
				£				£
1921	11,301	120,735	*	5,736	11,491	15,563	1,418,386	7,271
1929	16,738	151,116	1,820,701	7,238	10,645	14,517	1,690,560	10,379
1931	16,496	126,812	1,414,061	5,172	8,997	10,743	1,425,184	7,841
1932	17,148	128,359	1,366,764	4,944	8,700	10,211	1,407,450	7,853
1938	18,742	189,349	2,132,966	5,995	11,461	16,480	1,854,936	10,831
1939	19,173	186,720	2,149,154	6,024	10,933	15,417	1,760,534	10,356
1940	18,388	179,066	2,199,564	6,347	11,082	14,620	1,827,662	10,851
1941	19,890	194,146	2,716,377	7,636	12,395	18,032	2,115,786	12,415

\* Not available on comparable basis.

Railway services were restricted in 1945-46 because of a shortage of coal caused by industrial disputes in collieries, yet the number of passenger journeys, viz., 267,423,100, and the revenue derived therefrom (£13,362,632) were the greatest on record. In 1944-45 there were 254,099,105 passenger journeys yielding £12,804,975 in revenue.

Goods (excluding livestock) carried in 1945-46 totalled 15,872,431 tons and the revenue was £13,198,372, as compared with 17,792,891 tons and £14,587,606 in 1944-45. The decrease was due in large part to the much-reduced quantity of coal transported and to the curtailment of services mentioned above. Particulars (as far as available since 1940-41) are contained in the following statement:—

TABLE 160.—Railways, Passenger and Goods Traffic,  
1938-39 to 1945-46.

Year ended 30th June.	Coaching Traffic.		Goods Traffic.	
	Number of Journeys.	Gross Earnings— Passengers, Mails, etc.	Goods and Livestock Tonnage.	Gross Earnings.
		£		£
1939	...	186,719,964	6,877,146	15,417,297
1940	...	179,066,305	7,174,555	14,619,716
1941	...	194,145,738	8,499,073	18,031,611
1942	...	218,846,454	10,638,485	*18,650,000
1943	...	237,441,277	12,766,227	*19,680,000
1944	...	250,565,758	12,866,613	*19,420,000
1945	...	254,099,105	12,304,975	*18,580,000
1946	...	267,423,100	13,362,632	*16,583,931

\*Tonnage of livestock estimated.

The increase in goods tonnage since 1938-39 was mainly due to war-time traffic. The tonnage of coal and coke represents about half the volume of goods traffic in each year. Between 1938-39 and 1945-46 passenger journeys increased by 80,703,136 or by 43.2 per cent.

The following statement shows the tonnage of the several classes of goods carried on the railways in various years from 1920-21 to 1940-41.

TABLE 161.—Railways, Classification of Goods Tonnage, 1920-21 to 1940-41.

Year ended 30th June.	General Merchandise.		Wool.	Live-stock.	Minerals.		Total Goods.
	Grain, Flour, etc.	Other.			Coal, Coke, and Shale.	Other.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1921 ...	1,216,834	3,375,443	93,760	732,804	8,881,793	1,262,494	15,563,131
1929 ...	1,767,585	3,631,914	179,960	729,581	5,801,880	2,405,723	14,516,643
1931 ...	2,128,431	2,067,736	162,031	639,043	4,564,964	1,180,854	10,743,109
1938 ...	1,885,082	3,633,902	185,009	390,633	8,022,537	1,863,216	16,480,379
1939 ...	2,072,176	3,344,060	165,156	738,386	7,633,188	1,464,331	15,417,297
1940 ...	2,026,527	3,339,874	207,207	807,554	6,937,534	1,351,020	14,619,716
1941 ...	2,144,761	3,973,793	200,206	766,489	9,339,709	1,606,653	18,031,611

The gross earnings in respect of the various classes of goods carried during 1940-41 were as follows:—Coal, coke, and shale, £2,047,645; other minerals, £472,801; livestock, £1,290,549; grain and flour, £1,394,685; wool, £803,617; general merchandise, £6,225,628; miscellaneous earnings for demurrage, etc., £180,039. Particulars are not available for later years.

#### PASSENGER FARES.

Passenger traffic is greatest on the suburban lines, viz., those within a 34 miles radius of Sydney or Newcastle, and fares on these lines are lower than those for equal distances elsewhere. Since November, 1933, concession fares have been charged for suburban travel during the week-end period. Return tickets for travel outside the Sydney or Newcastle suburban areas are issued at single fare plus one-third, and week-end excursion tickets at single fare for the return journey are issued to tourist and holiday resorts in the recognised tourist area.

The following table indicates the changes between June, 1921, and June, 1947, in the ordinary fares for single journeys from Sydney or Newcastle:—

TABLE 162.—Railway Fares for Single Tickets, to 30th June, 1947.

Date.	5 mls.	10 mls.	20 mls.	34 mls.	50 mls.	100 mls.	200 mls.	300 mls.
	d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
First Class.								
1921, June...	8	1 3	2 5	4 1	7 7	18 7	40 7	62 2
1924, June...	8	1 2	2 0	3 2	6 8	17 7	37 7	56 5
1927, Dec....	8½	1 3	2 1	3 4	6 10	17 9	37 9	56 7
1933, Nov....	7	1 0	1 11	3 0	6 0	15 5	33 1	49 2
1939, Mar.*	8	1 1	2 1	3 4	6 9	17 4	36 5	54 7
Second Class.								
1921, June...	6	0 10½	1 6	2 7½	5 0	12 2	25 7	38 3
1924, June...	6	0 10½	1 6	2 4½	4 9	12 1	25 4	37 11
1927, Dec....	6½	0 11	1 7	2 6½	4 11	12 2	25 6	38 1
1933, Nov....	5	0 9	1 5	2 3	4 4	10 10	22 11	34 2
1939, Mar.*	6	0 10	1 7	2 6	4 10	12 2	25 4	37 10

\* Current in June, 1947, except first-class fares in suburban areas which were abolished in Newcastle in 1939 and in Sydney in 1940.

In November, 1933, a reduction of approximately 10 per cent. was made in second-class fares and a slightly greater reduction in first class fares. The next change was an increase of 10 per cent. from 1st March, 1939. In the suburban services first-class accommodation has not been provided in the Newcastle district since 1st February, 1939, nor in the Metropolitan district since 1st January, 1940.

Particulars of changes in the cost of monthly periodical tickets are shown in the following table:—

TABLE 163.—Railway Fares—Monthly Periodical Tickets, to 30th June, 1947.

Date.	5 miles.	10 miles.	20 miles.	34 miles.	50 miles.	100 miles.	200 miles.	300 miles.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
First Class.								
1921, June	30 9	44 0	58 0	69 3	79 9	112 6	156 3	181 9
1922, June	30 9	43 3	59 3	68 9	77 0	100 3	138 9	168 0
1924, June	27 4	38 3	52 3	59 9	77 0	100 3	138 9	163 0
1928, Jan.	29 4	41 0	55 11	64 0	81 6	106 6	147 0	178 0
1933, Nov.	25 9	36 9	50 3	57 6	69 9	92 6	128 6	155 9
1939, Mar.*	28 6	40 3	53 9	62 3	76 6	103 9	142 0	171 0
Second Class.								
1921, June	20 6	29 0	39 3	46 0	51 0	66 9	92 6	112 6
1922, June	20 6	28 9	39 6	45 9	51 3	66 9	92 6	112 6
1924, June	20 6	28 8	39 2	44 10	51 3	66 9	92 6	112 0
1928, Jan.	22 0	30 9	42 0	48 0	54 3	70 9	98 0	118 9
1933, Nov.	19 6	27 6	37 9	43 3	48 3	63 9	88 9	107 6
1939, Mar.*	21 6	30 3	40 3	46 9	52 9	71 6	98 0	118 0

\* Current in June, 1947, except first-class tickets in suburban areas which were abolished in Newcastle in 1939 and in Sydney in 1940.

The fares quoted represent the maximum charges, but liberal concessions are made to women, students and youths in business. At the beginning of January, 1928, fares were raised by about 6 or 7 per cent., and in November, 1933, a reduction of 10 per cent. was made. An average increase of 10 per cent. was made on 1st March, 1939.

Weekly tickets known as "Workmen's Weekly Tickets" are issued at special fares for the Metropolitan and Newcastle suburban lines, the Helensburgh-Port Kembla-Kiama section of the Illawarra line, and the Katoomba-Cooerwull section of the western line. The tickets are available for one journey each way per day, including Sunday; the forward journey is restricted to trains which reach the passenger's destination within specified hours, with due regard to the hours of shift workers. Substantial reductions were made as from 1st January, 1939, in the charges for workmen's weekly tickets for distances exceeding 10 miles and a fixed charge of 5s. was introduced for distances exceeding 16 miles. The fares were raised by 10 per cent. as from 1st March, 1939.

TABLE 164.—Railways, Fares for Workmen's Weekly Tickets, to 30th June, 1947.

Distance.	Workmen's Weekly Tickets—Second Class.				
	June, 1921.	Dec., 1927.	Oct., 1932.	Jan., 1939.	March, 1939.
Miles.	s. d.	s. d.	s. d.	s. d.	s. d.
1	1 3	1 8	1 5	1 5	1 6
5	2 11	3 11	3 4	3 4	3 8
10	4 1	5 6	4 8	4 8	5 2
20	5 5	7 4	6 4	5 0	5 6
30	6 11	9 0	7 10		
34	7 5	9 8	8 2		

\* Current, June, 1947.

FREIGHT CHARGES.

The system adopted in fixing freights on merchandise and livestock is to charge the lowest scale of freight on commodities of low values and on those which are used to assist production. The charge per ton mile decreases as the distance hauled increases.

The highest class freight includes expensive, bulky, or fragile articles, such as boots, drapery, drugs, groceries, furniture, liquors, glassware, cutlery, ironmongery, confectionery, and carpets; the lowest class applies to manures.

The rates for nearly all classes of freight were increased by about 10 per cent. on 1st March, 1939; exceptions included wool, agricultural produce and crude ores.

The trend of rates for various classes of freight carried for 100 miles and 500 miles is shown below. The rates quoted for livestock are per four-wheeled truck; other rates are per ton.

TABLE 165.—Railway Freight Charges, to 30th June, 1947.

Date.	Ordinary Goods		Agricultural Pro- duce.	Butter.	Frozen Beef and Mutton.	Wool.	Live- stock.	Crude ore (value not over £20 per ton).
	Highest Class Freight.	Lowest Class Freight.						
100 miles.								
1921, June ...	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1921, June ...	75 0	6 6	11 5	31 7	14 7	37 11	110 5	6 5
1922, June ...	76 8	6 9	11 6	35 5	18 11	41 8	109 9	6 5
1925, June ...	76 8	6 9	11 5	24 10	18 11	41 8	109 9	6 5
1926, December ...	76 8	6 9	12 0	27 4	18 11	41 8	120 9	6 5
1932, December ...	76 8	6 9	12 0	27 4	18 11	37 6	108 8	6 5
1933, July ...	76 8	6 9	12 0	27 4	18 11	33 9	97 10	6 5
1937, October ...	76 8	6 9	12 0	27 4	18 11	37 6	108 8	7 1
1939, March ...	84 4	7 5	12 0	30 1	20 10	37 6	120 9	7 1
1944, January†	84 4	5 11	12 0	27 1	20 10	37 6	120 9	7 1
500 miles.								
1921, June ...	193 3	15 0	18 2	94 0	72 11	104 4	303 4	22 6*
1922, June ...	197 6	12 4	19 0	82 4	43 11	109 5	299 9	22 6*
1925, June ...	197 6	12 4	19 0	57 7	43 11	109 5	299 9	22 6*
1926, December ...	197 6	12 4	19 11	63 4	43 11	109 5	329 8	22 6*
1932, December ...	197 6	12 4	19 11	63 4	43 11	98 5	296 8	22 6*
1933, July ...	197 6	12 4	19 11	63 4	43 11	88 8	267 0	22 6*
1937, October ...	197 6	12 4	19 11	63 4	43 11	98 6	296 8	19 9†
1939, March ...	217 3	13 7	19 11	69 8	48 4	98 6	329 8	19 9†
1944, January†	217 3	10 10	19 11	62 8	48 4	98 6	329 8	19 9†

\* Rate 17s. 10½d., if value of ore was £10 or less per ton.  
† Rate since December, 1937, if not over £50 in value.

† Rate since December, 1937, if not over £50 in value.  
‡ Current, June, 1947.



## GRADIENTS.

The railways of New South Wales pass through mountainous country over the Great Dividing Range which separates the narrow coastal plain from the interior. Consequently there are steep gradients and sharp curves in many sections, including parts of the trunk lines.

The following statement shows the miles on different gradients in June, 1946:—

TABLE 166.—Railway Gradients, June, 1946.

Gradients.	Southern System.	Western System.	Northern System.	Total.
1 in	miles.	miles.	miles.	miles.
18 to 30	16½	4½	3½	24½
31 „ 40	75¾	61	55½	192½
41 „ 50	74½	52	88	214½
51 „ 60	71¾	77¾	66¾	216½
61 „ 70	68½	68½	42¾	179½
71 „ 80	188¾	138¾	181½	509
81 „ 90	49¾	58	52½	160
91 „ 100	120½	177¾	98	396½
101 „ 150	291	284½	177½	722¾
151 „ 200	141½	122½	98½	362½
201 „ 250	72½	77¾	50¾	201
251 „ 300	102½	110½	72½	285½
301 „ level	945¾	959¾	758½	2,664
Total ...	2,188¾	2,193	1,745¾	6,127½

## SIGNALLING AND SAFETY APPLIANCES.

In the matter of signalling and safety appliances the railways of New South Wales have progressed with modern invention. The points are interlocked on all the lines with the exception of a few in remote country districts where the traffic is light. The automatic signalling system is in operation on all the suburban lines under the electrical system.

## ROLLING STOCK.

A classification of the rolling stock of the State railways is shown in the following table:—

TABLE 167.—Railways, Rolling Stock.

Classification.	June, 1926.		June, 1936.		June, 1946.	
	No.	Capacity.	No.	Capacity.	No.	Capacity.
Locomotive—Steam ... ..	1,402	Tractive power. 000 lb. 35,369	1,378	Tractive power. 000 lb. 37,186	1,146	Tractive power. 000 lb. 32,451
Diesel Power Vans ... ..	...	...	...	...	5	50
Coaching—		Pas'gers.		Pas'gers.		Pas'gers.
Passenger ... ..	1,719	101,890	2,187	136,232	2,339	140,265
Motor Passenger ... ..	22	1,144	46	2,354	49	2,432
Sleeping ... ..	93	2,400	100	2,461	107	2,481
Horse Boxes, Brake Vans, etc. ... ..	433	144	371	614	321	838
Total ... ..	2,267	105,578	2,704	141,661	2,816	146,016
Goods—		tons.		tons.		tons.
Open Waggon ... ..	17,255	287,345	16,894	270,711	19,128	330,010
Livestock Waggon ... ..	3,156	19,564	2,903	18,440	2,851	17,980
Louvred Vans ... ..	1,007	14,944	1,110	17,844	1,126	18,720
Refrigerator Vans ... ..	237	3,430	278	4,220	345	5,942
Brake Vans ... ..	643	...	667	...	700	...
Other ... ..	69	755	63	759	294	2,954
Total ... ..	22,367	326,038	21,915	311,974	24,444	375,606
Service Stock ... ..	1,601	...	1,425	...	1,271	...

Rail motors have been provided in a number of country districts where the population is not sufficient to warrant the provision of ordinary services. Diesel train services are operated between Parkes and Broken Hill, a distance of 422 miles, and between Sydney and Canberra, 202 miles.

## VICTORIAN GOVERNMENT RAILWAYS IN NEW SOUTH WALES.

In the southern portion of New South Wales the Government of Victoria has acquired certain railway interests by the purchase from a private company of a line between Deniliquin and Moama, and the construction and maintenance of five border railways by agreement with the Government of New South Wales.

The agreement provides for railways on the 5ft. 3in. gauge, but the works within New South Wales are constructed suitably for conversion to the standard gauge, viz., 4ft. 8½in. The lines are operated by the Victorian Railway Commissioners.

Three of the lines authorised under the agreement have been opened for traffic and the length of these, with the Deniliquin-Moama line, is 241 miles 11 chains. The capital cost at 28th February, 1946, was £1,445,384. During the year ended February, 1946, the revenue amounted to £48,937, working expenses to £62,116, and interest to £51,377. The train mileage was 61,630, the number of passengers 27,188, and the goods traffic 101,711 tons.

#### PRIVATE RAILWAY LINES.

The established policy in New South Wales has been to keep the railways under State control, and with the exception of short lines connecting coal and other mines with the main railways, there are only 85 miles of private lines open for general traffic.

During the year 1888 a line of 3 ft. 6 in., gauge was laid down from Silverton and Broken Hill to the South Australian border; the length is 37 miles. A short line connects the Government railway at Liverpool with the Warwick Farm Racecourse.

The Seaham Coal Company's line connects the West Wallsend and Seaham Collieries with Cockle Creek. The South Maitland system supplies the mining districts of East Greta and Cessnock. Another line runs between the collieries in Hexham and Minmi. The New Red Head line connects Belmont and Adamstown. Particulars of these railways were published on page 372 of the 1939-40 issue of the Year Book.

#### RAILWAY GAUGES OF AUSTRALIA.

Particulars of the gauges of the railways in each State as at 30th June, 1946, are shown below. The figures relate to Government lines and to private railways open for general traffic, classified according to the States in which they are located. Particulars of private lines used exclusively for special traffic are not included in the figures:—

TABLE 168.—Railway Lines and Gauges in Australia.

State.	Miles of each Gauge open for traffic.						Total Miles.
	2 ft.	2 ft. 6 in.	3 ft.	3 ft. 6 in.	4 ft. 8½ in.	5 ft. 3 in.	
New South Wales ...	...	...	...	37	6,178	241	6,456
Victoria ...	...	114	11	...	...	4,409	4,534
Queensland ...	116	...	...	6,516	69	...	6,701
South Australia and Northern Territory	...	...	...	2,155	654	1,480	4,289
Western Australia ...	...	...	...	4,658	454	...	5,112
Tasmania ...	7	...	...	752	...	...	759
Australian Capital ...	...	...	...	...	5	...	5
Total ...	123	114	11	14,118	7,360	6,130	27,856

The distances by rail between Sydney and the other capital cities are as follows:—Brisbane *via* North Coast line 613 miles, Brisbane *via* Wallangarra 715 miles, Melbourne 590 miles, Adelaide *via* Melbourne, 1,073 miles, and Perth *via* Melbourne and Adelaide is 1,409 miles, but a line across New South Wales opened for traffic in November, 1927, affords direct communication over a distance of 699 miles.

Railway works undertaken for the purpose of facilitating interstate communication have been described in previous issues of the Year Book.

## STANDARDISATION OF AUSTRALIAN RAILWAY GAUGES.

In 1921 a Royal Commission reported upon the diversity of railway gauges in Australia and upon its recommendations the Premiers' Conference of that year resolved that a uniform gauge (4 ft. 8½ in.) was essential to the development and defence of the Commonwealth. Interstate routes have been shortened and breaks of gauge have been eliminated between a few points since then, but other steps to unify gauges were not taken.

Rail transport difficulties of the war years (1939-45) prompted the Commonwealth Government to instruct the Director-General of Land Transport (Sir Harold Clapp) to report on the standardisation of Australian railway gauges. His report was presented in March, 1945, and recommended:—

## Part A.—

- (1) Conversion to standard gauge (4 ft. 8½ in.) of the 5 ft. 3 in. gauge and certain narrow gauge lines in Victoria (4,980 miles) and South Australia (2,339 miles), including the Port Pirie-Broken Hill line, and the acquisition by New South Wales and conversion of that part of the latter line owned by the Silverton Tramway Company Limited (37 miles).
- (2) Construction of a standard gauge railway from Fremantle-Perth to Kalgoorlie (all Western Australian 3 ft. 6 in. gauge lines to remain for the time being); also provision, by construction or by conversion of existing lines, of strategic and developmental lines (a) through Central Queensland, connecting Bourke with Townsville and Dajarra (involving new lines from Bourke to Longreach *via* Blackall, and conversion or third rail provision between Cumnamulla and Westgate, Longreach and Townsville, and between Hughenden and Dajarra with branches) (1,544 miles); and (b) through the Barkly Tableland from Dajarra through Camooweal and Newcastle Waters to Birdum; the existing Birdum-Darwin line to be converted (961 miles).

## Part B.—

That upon the Commonwealth and relevant States agreeing to undertake the foregoing works, detailed plans and estimates be made for conversion to standard gauge of the parts of the Queensland and Western Australian systems not covered by Part A.

Exclusive of land resumptions, the estimated cost of the works was £76,752,000 for Part A and £132,000,000 for Part B.

At Premiers' Conferences the recommendations were accepted in principle in August, 1945, and the proposals (with some modifications) were adopted in detail in January, 1946. Subsequently Queensland and Western Australia raised objections in respect of their parts, but the Commonwealth and the three south-eastern States agreed to carry out the works recommended (excepting the Dajarra-Birdum line); New South Wales also agreed to extend its line from Bourke to Barrington on the Queensland border, and the Commonwealth undertook to convert the Port Augusta-Alice Springs line (not covered by the original plan) and to extend it to Birdum.

The agreement between the Commonwealth and these States, ratified by the Commonwealth Railway Standardisation Agreement Act, 1946, provides for the cost of the scheme to be met as to (a) the Port Augusta-Darwin line, solely by the Commonwealth; (b) new rolling stock for the South Australian and Victorian systems, 75 per cent. of the estimated cost by the State concerned, and the balance, including expenditure in excess of estimated cost, by the Commonwealth (South Australian stock to be deemed to include that of Silverton Tramway); (c) other standardisation works, 50 per cent. by the Commonwealth and the balance by the three States on a per capita basis; and (d) works connected with but not essential to standardisation, wholly by the State concerned. On this basis the estimated cost was £38,925,832 to the Commonwealth, £10,130,163 to New South Wales, £15,496,958 to Victoria and £5,881,643 to South Australia, making £70,434,596 in all.

The funds for all standardisation works are to be provided by the Commonwealth and repayment of each State's liability is to extend over fifty years by annual instalments. Interest is to be payable at the rate paid by the Commonwealth on the loan from which the loan to the State is made.

The Act provides for a Railways Council, consisting of Commonwealth and State Ministers, to make decisions in matters arising in implementing the agreement, and a Railways Standardisation Board comprising a Director-General and four other persons qualified in railway engineering or administration to co-ordinate the works to be carried out by the several constructing authorities.

An enabling Act was passed by the South Australian Parliament in December, 1946, but up to September, 1947, the agreement had not been ratified by New South Wales or Victoria.

#### STATE TRAMWAY AND OMNIBUS SERVICES.

The State Government conducts tramway and omnibus services in the Metropolitan and Newcastle districts. All the tramways are the property of the Government, but there are a number of privately owned omnibus services in these districts and in other parts of the State. The first Government omnibus service in Newcastle was commenced on 22nd September, 1932, and in the Metropolis on 25th December, 1932.

The Government tramway and omnibus services are administered by the Commissioner for Road Transport and Tramways, who also exercises special powers for the regulation of the private omnibus services, as described on page 227. The tramways were administered by the Railway Commissioners until August, 1930; and after a number of changes had been made in the administration of the State transport services, they were vested in the Commissioner for Road Transport in December, 1932.

#### *Length of State Tramways.*

The length of the State tramways is 172 miles, viz., 143 miles of tramways and 9 miles of trolley bus routes in the Metropolitan district and 20½ miles of tramways in Newcastle. In 1926, there were 228½ miles of tramways, consisting of 180 miles in the Metropolis, 35 miles in Newcastle, 4 miles in Maitland and 10 miles in Broken Hill. The tramways in Maitland and Broken Hill were closed in 1927 and some services in other

districts have been replaced by railway or omnibus services. The tram services were extended across Sydney Harbour Bridge in March, 1932, and the omnibus services in August, 1937.

The gauge of the tramways is 4 feet 8½ inches, and all the services are operated by electric power.

The route and track mileage of the tramways at 30th June, 1946, is shown below, the figures being exclusive of 44 miles 53 chains of sidings, loops and crossovers.

TABLE 169.—Tramways, Length of Lines, June, 1946.

Line.	Route Mileage.*	Track Mileage.
Metropolitan—	mls. ch.	mls. ch.
City and Suburban ... ..	(a) 113 11	215 22
North Sydney ... ..	22 8	42 54
Ashfield to Mortlake and Cabarita ... ..	8 33	15 5
Rockdale to Brighton-le-Sands ... ..	1 50	1 50
Kogarah-Rockdale-Sans Souci ... ..	(b) 6 32	11 10
Total, Metropolitan ... ..	(c) 151 54	285 61
Newcastle City and Suburban ... ..	20 31	36 61
Total Tramways, June, 1946 ... ..	(c) 172 5	322 42

\* Includes Trolley Bus Routes (a) 2 mls. 18 chns.; (b) 6 mls. 32 chns.; (c) 8 mls. 50 chns.

#### FINANCES OF THE STATE TRAMWAYS AND OMNIBUS SERVICES.

Prior to the year 1938-39 the State tramways and motor omnibus services were administered as separate undertakings and separate financial accounts were published. As the omnibus services were extended into areas previously served by trams, the two undertakings were merged into a joint enterprise and the manner of presenting the annual accounts was altered in 1938-39 so that separate details regarding the financial results are no longer available.

#### *State Tramways and Omnibuses—Capital Funds.*

The capital of the State tramways and omnibuses has been obtained mainly from the General Loan Account of the State and is interest bearing excepting a small advance from the Consolidated Revenue Fund, and capital reserves. The latter consists of profits from the sale of assets, and receipts from the Public Vehicles Fund comprising half the service license fees on motor omnibus services in the Metropolitan and Newcastle Transport Districts.

At 30th June, 1946, the capital debt of the tramways as represented by repayable advances, amounted to £7,517,408, consisting of £7,476,887 owing to the General Loan Account and £40,521 to the Consolidated Revenue Fund; capital reserves amounted to £155,022, viz., profits from the sale of assets £54,969 and receipts from the Public Vehicles Fund, £100,053. The capital debt of the motor omnibus services, amounting to £379,350, is owing to the General Loan Account.

*State Tramways and Omnibuses—Capital Cost of Assets.*

The capital cost of the tramway and omnibus assets at 30th June, 1937 and later years is shown in the following table. The total capital cost of the services exceeds the amount of capital funds stated above by reason of the purchase of new assets and the repayment of capital indebtedness from revenue reserved for depreciation.

TABLE 170.—State Tramways and Omnibuses, Capital Cost, 1937 to 1946

At. 30th June.	Metropolitan.		Newcastle.		Total.		Tramways and Omni- buses.
	Tramways.	Omni- buses.	Tram- ways.	Omni- buses.	Tramways.	Omni- buses.	
	£	£	£	£	£	£	£
1937 ...	8,201,326	421,275	845,314	24,206	9,046,640	445,481	9,492,121
1938 ...	8,308,605	688,100	830,300	17,037	9,138,905	705,137	9,844,042
1939 ...	8,306,480	799,998	832,880	89,134	9,139,360	889,132	10,028,492
1940 ...	8,283,992	948,162	832,849	96,933	9,116,841	1,045,095	10,161,936
1941 ...	8,079,887	1,007,089	830,036	109,923	8,909,923	1,117,012	10,026,935
1942 ...	7,943,095	984,607	815,978	131,535	8,759,073	1,116,142	9,875,215
1943 ...	7,922,562	954,616	793,969	147,506	8,716,531	1,102,122	9,818,653
1944 ...	7,918,147	985,980	793,348	158,093	8,711,495	1,144,073	9,855,568
1945 ...	7,922,434	1,015,079	792,401	163,275	8,714,835	1,178,354	9,893,189
1946 ...	7,934,314	1,030,213	792,401	163,275	8,726,715	1,193,488	9,920,203

The capital cost of the tramways at 30th June, 1946, comprised cost of track, wiring, substations, etc., £5,014,221, rolling stock £2,855,401, machinery and workshops £547,843, stores £150,000, and administrative building £159,250. The capital cost of the omnibuses consisted of land and buildings £63,733, omnibuses £1,100,161, and plant and machinery £29,594.

*State Tramways and Omnibuses—Revenue and Expenditure.*

The following table contains particulars of the annual revenue of the State tramways and omnibuses and the working expenses of both services combined.

TABLE 171.—State Tramways and Omnibuses, Gross Earnings and Working Expenses, 1936-37 to 1945-46.

Year ended 30th June.	Gross Earnings.			Working Expenses.			Net Earnings.
	Tramways.	Omni- buses.	Total.	Adminis- tration and Operation.	Current Deprecia- tion.	Total.	
	£	£	£	£	£	£	£
1937 ...	3,423,205	504,498	3,927,703	3,089,604	214,995	3,304,599	623,104
1938 ...	3,529,368	765,356	4,294,724	3,559,056	258,139	3,817,195	477,529
1939 ...	3,448,792	925,542	4,374,334	3,707,139	242,523	3,949,662	424,672
1940 ...	3,330,593	1,137,316	4,467,909	3,767,833	265,103	4,032,936	434,973
1941 ...	3,436,195	1,353,891	4,790,086	3,931,943	257,208	4,189,151	600,935
1942 ...	3,802,494	1,626,918	5,429,412	4,646,224	222,043	4,868,267	561,145
1943 ...	4,114,175	1,467,670	5,581,845	4,946,017	191,173	5,137,190	444,655
1944 ...	4,301,530	1,398,790	5,700,320	5,145,515	190,900	5,336,415	363,905
1945 ...	4,319,891	1,469,891	5,789,782	5,347,615	166,294	5,513,909	275,873
1946 ...	4,370,196	1,565,477	5,935,673	5,828,293	152,539	5,978,832	(-)43,159

The rapid increase in gross earnings in the war years, and the larger share of the tramways in that increase, reflected the effects of severe petrol rationing upon private motor traffic, and curtailment of the previously expanding omnibus services after 1940-41 because of reduced supplies of fuel oil and other requisites. Of gross earnings, which increased by £1,561,339 or 35.7 per cent. between 1938-39 and 1945-46, omnibuses earned 21.2 per cent. in 1938-39, 30 per cent. in 1941-42 and 26.4 per cent. in 1945-46.

The excess of earnings over working expenses was greater in 1940-41 than for several years, but thereafter operating costs increased rapidly (and faster than earnings) because of higher salaries and wages, rising prices of materials and the heavy cost of maintaining the ageing, and often overloaded, trams and omnibuses. Working expenses absorbed 90.3 per cent. of gross earnings in 1938-39, and 87.5 per cent. in 1940-41, but in 1945-46 exceeded them by £43,159 or 0.7 per cent.

Loan charges required 9.2 per cent. of gross earnings in 1938-39 but only 5.6 per cent. of them in 1945-46; over the period they were lightened because of repayments to the Treasury and by reductions in the rate of interest payable on the public debt of the State.

In every year from 1933-34 to 1943-44 earnings of these services more than covered all working and capital charges, but losses of £95,027 and £379,106 were shown in 1944-45 and 1945-46, respectively. Between 1943-44 and 1945-46 working expenses increased by £642,417 and earnings by £235,353, and there was a saving of £19,834 in capital charges.

The net financial results of the tramways and omnibuses after the payment of capital debt charges are shown below:—

TABLE 172.—State Tramways and Omnibuses, Capital Charges and Net Results, 1936-37 to 1945-46.

Year ended 30th June.	Net Earnings.	Capital Charges.				Current Surplus. †
		Interest.	Exchange on Interest. *	Sinking Fund.	Total Capital Charges.	
	£	£	£	£	£	£
1937 ... ..	623,104	328,950	44,200	37,332	410,482	212,622
1938 ... ..	477,529	336,872	42,573	38,349	417,794	59,735
1939 ... ..	424,672	320,154	42,271	41,537	403,932	20,710
1940 ... ..	434,973	316,949	44,542	44,592	406,033	28,890
1941 ... ..	600,935	313,918	44,216	46,522	404,656	196,279
1942 ... ..	561,145	294,777	41,465	47,179	383,421	177,724
1943 ... ..	444,655	280,737	40,016	57,145	377,898	66,757
1944 ... ..	363,905	271,246	38,082	46,453	355,781	8,124
1945 ... ..	275,873	273,098	39,298	58,504	370,900	(-) 95,027
1946 ... ..	(-) 43,159	244,287	33,580	58,071	335,947	(-) 379,106

\* Includes Loan Management Expenses in 1938-39 and later years.

† Subject to further appropriations for arrears of depreciation—see below.

Since the inception of the Government omnibuses in 1932, annual provision has been made for accruing depreciation of omnibus assets. This system was adopted in regard to tramways in 1933-34; previously tramway assets had been written off only when abandoned or scrapped.



The charges for depreciation in the years reviewed are represented by the total of current depreciation in Table 172 and Sinking Fund in Table 173. In addition to charges applicable to the year of operation large appropriations were made between 1933-34 and 1942-43 in respect of accumulated arrears of depreciation. These further appropriations and the balance of surplus then remaining in each year 1936-37 to 1942-43 were as follows:—

Year.	Arrears of Depreciation.	Final Surplus.	Year.	Arrears of Depreciation.	Final Surplus.
	£	£		£	£
1936-37 ...	103,106	103,516	1940-41 ...	181,713	14,566
1937-38 ...	31,634	28,101	1941-42 ...	150,884	26,840
1938-39 ...	6,205	14,505	1942-43 ...	32,809	33,948
1939-40 ...	17,385	11,505			

The total earnings of the State tramways and omnibuses amounted to £5,935,673 in 1945-46, of which £5,372,297 or 90.5 per cent., was obtained from services in the Metropolitan district, and £563,376 or 9.5 per cent., from the Newcastle services.

Details of the financial results of the Metropolitan services are shown follows:—

TABLE 173.—State Tramways and Omnibuses, Metropolitan Services, 1936-37 to 1945-46.

Year ended 30th June.	Revenue.		Expenditure.				Current Surplus.*
	Tramways.	Omnibuses.	Administration, Operating Expenses.	Current Depreciation.	Capital Debt Charges.	Total Expenditure.	
	£	£	£	£	£	£	£
1937 ...	3,208,871	482,331	2,895,248	203,355	368,799	3,467,402	223,800
1938 ...	3,304,526	708,898	3,324,023	239,742	372,505	3,936,270	77,154
1939 ...	3,244,278	838,007	3,459,958	224,466	356,518	4,040,942	41,343
1940 ...	3,145,741	1,021,895	3,516,210	243,949	363,132	4,123,291	44,345
1941 ...	3,241,529	1,209,946	3,662,884	237,741	355,435	4,256,069	195,415
1942 ...	3,575,724	1,411,155	4,298,910	204,097	334,592	4,837,599	149,280
1943 ...	3,841,406	1,238,066	4,530,722	172,908	330,470	5,034,100	45,372
1944 ...	4,004,484	1,164,968	4,682,422	174,014	307,368	5,163,804	5,648
1945 ...	4,013,027	1,222,672	4,858,289	151,188	323,121	5,332,598	(-) 96,899
1946 ...	4,070,752	1,301,545	5,285,884	140,579	292,127	5,718,590	(-) 346,293

\* Subject to further appropriations for arrears of depreciation.

(-) Deficiency.

Tramway earnings represented 75.8 per cent., and omnibus earnings 24.2 per cent. of the total in 1945-46.

The further appropriations from surpluses as shown for arrears of depreciation of tramway assets were £88,489, £16,920, £6,205, £17,385, £179,963, £129,868 and £12,187, respectively, in the years 1936-37 to 1942-43. The deficiency, £96,899, in 1944-45 was the first of the Metropolitan services since the adoption in 1933-34 of the practice of including in the accounts a charge for current depreciation. In 1945-46 working expenses, including depreciation, exceeded earnings by £54,166 and after adding debt charges, the deficiency amounted to £346,293.

As the following statement shows, omnibuses are relatively more important in the Newcastle than the Metropolitan services and in 1945-46 the proportions of earnings in Newcastle were 46.8 per cent. from omnibuses and 53.2 per cent. from tramways.

TABLE 174.—State Tramways and Omnibuses, Newcastle Services, 1936-37 to 1945-46.

Year ended 30th June.	Revenue.		Expenditure.				Current Deficit. *
	Tramways.	Omnibuses.	Administration, Operating Expenses.	Current Depreciation.	Capital Debt Charges.	Total Expenditure.	
	£	£	£	£	£	£	£
1937 ...	214,334	22,167	194,356	11,640	41,663	247,679	11,178
1938 ...	224,842	56,458	235,033	18,397	45,289	298,719	17,419
1939 ...	204,514	87,535	247,181	18,057	47,444	312,682	20,633
1940 ...	184,852	115,421	251,623	21,164	42,951	315,728	15,455
1941 ...	194,666	143,945	269,059	19,467	49,221	337,747	†864
1942 ...	226,770	215,762	347,314	17,946	48,828	414,038	†28,444
1943 ...	272,769	229,604	415,295	18,265	47,428	480,988	†21,385
1944 ...	297,046	233,822	463,093	16,886	48,413	523,392	†2,476
1945 ...	306,864	247,219	489,326	15,106	47,779	552,211	†1,872
1946 ...	299,444	263,932	540,409	11,960	43,820	596,189	32,813

\* Subject to further appropriations for arrears of depreciation.

† Surplus.

Additional appropriations in respect of arrears of depreciation of tramway assets amounted to £17,617 in 1936-37, £14,714 in 1937-38, £1,750 in 1940-41, £21,016 in 1941-42 and £20,622 in 1942-43.

The deficiency in 1945-46 followed five years in which surpluses were earned. Prior to 1940-41 the Newcastle services had been unprofitable.

#### STATE TRAMWAY AND OMNIBUS TRAFFIC.

The following statement contains particulars of the passenger traffic in the Metropolitan and Newcastle districts in various years:—

TABLE 175.—State Tramways and Omnibuses, Passenger Traffic, 1928-29 to 1945-46.

Year ended 30th June.	Tramways.		Omnibuses.		Tramways and Omnibuses.		
	Metro-politan.*	New-castle.	Metro-politan.*	New-castle.	Metro-politan.*	New-castle.	Total.
	000	000	000	000	000	000	000
1929 ...	315,668	17,808	...	...	315,668	17,808	333,476
1931 ...	253,243	13,104	...	...	253,243	13,104	266,347
1938 ...	297,400	20,671	50,096	2,557	347,496	23,228	370,724
1939 ...	292,118	18,666	59,146	5,269	351,264	23,935	375,199
1940 ...	281,717	16,999	71,942	7,683	353,659	24,682	378,341
1941 ...	293,746	17,782	85,752	9,609	379,498	27,391	406,889
1942 ...	339,648	20,905	102,334	13,750	441,982	34,655	476,637
1943 ...	362,224	24,913	98,751	15,064	460,975	39,977	500,952
1944 ...	390,684	28,063	100,412	15,363	491,096	43,426	534,522
1945 ...	394,509	29,716	105,103	16,581	499,612	46,297	545,909
1946 ...	389,300	28,044	108,043	17,117	497,343	45,161	542,504

\* Excluding passengers across the Sydney Harbour Bridge whose journeys did not extend beyond the Bridge section—see next table.

Factors chiefly responsible for the rapid growth of passenger traffic during the war years were the high levels of employment and earnings, travel by service personnel, and much less use of private vehicles as a result of petrol rationing. Between 1938-39 and 1941-42, the total number of passengers increased by 101,438,000 or 27 per cent., and the increase to 1945-46, a year of slight decrease, was 167,305,000 or 44 per cent.

During the war years, many former city-suburban omnibus services in Sydney and Newcastle were operated only as feeder services to the tramway systems in order to economise in manpower, fuel and equipment. The through services were restored during 1945-46 and 1946-47.

Statistics of passenger traffic are obtained from records of tickets issued and, as a general rule, each ticket represents a passenger journey. For the Sydney Harbour Bridge section, however, a special ticket is issued to each passenger and a second ticket if the journey extends over any other section. The total number of passengers carried by trams and omnibuses across the bridge since 1936-37 is stated below; those whose journey extended beyond the Bridge section are included also in Table 175.

TABLE 176.—Sydney Harbour Bridge, Passenger Traffic,  
1936-37 to 1945-46.

Year.	Tram- ways.	Omnibuses.	Total.	Year.	Tram- ways.	Omnibuses.	Total.
	000	000	000		000	000	000
1936-37 ...	10,375	...	10,375	1941-42 ..	15,089	6,304	21,393
1937-38 ...	10,396	962	11,358	1942-43 ...	16,254	6,003	22,257
1938-39 ...	11,453	1,628	13,081	1943-44 ...	17,302	5,394	22,696
1939-40 ...	12,823	3,847	16,670	1944-45 ..	17,478	5,687	23,165
1940-41 ...	13,323	5,492	18,815	1945-46 ..	17,275	6,007	23,282

Statistics of tram car mileage have not been available since 1939-40. In 1944-45 the mileage of omnibuses was 14,262,000 miles in the Metropolitan district and 3,486,000 in Newcastle, and the mileages in 1945-46 were 15,058,000 and 3,491,000, respectively. Average gross earnings per omnibus mile in the Metropolitan district were 20.6d in 1944-45 and 20. 7d. in 1945-46. In Newcastle the average was 17.0d. in 1944-45 and 18.01d. in 1945-46.

#### TRAM AND OMNIBUS FARES.

The tramways are divided into sections of an average length of nearly 2 miles in the Metropolitan district and 1½ miles in Newcastle.

The fares charged on trams since 1st November, 1920, and subsequent dates, when alterations were made, are shown below:—

TABLE 177.—Tramways, Scale of Fares, to 30th June, 1947.

Sections.	Date of Alteration—(ordinary rates).				Concession Rates, Mon.—Fri., 10 a.m. to 4 p.m., since December, 1930.
	November, 1920.	December, 1927.	December, 1930.	October, 1932.	
	d.	d.	d.	d.	d.
One ... ..	2	2	2	2	2
Two ... ..	3	4	4	3	3
Three ... ..	4	5	5	4†	4
Four ... ..	5	6	6	5	4
Five and six ... ..	6	6	6	6	4
Harbour Bridge...	...	...	4*	3‡	3‡

\* March, 1932.

† Maximum fare on Newcastle lines.

‡ 2d. from 1st January, 1939.

The fares on Sundays were higher by 1d. per journey between 1st November, 1920, and 11th February, 1923, when this extra charge was abolished. On 2nd February, 1931, the concession fares for journeys between the hours 10 a.m. and 4 p.m. on week-days (except Saturdays) became general on the Newcastle tramways irrespective of the day or hour of the journey.

Children are carried at lower rates. The fare for children under 12 years of age was 1d. for one, two, or three sections, and 2d. for longer journeys, until 1st August, 1934, when the fare was reduced to 1d. per journey for children under 14 years. The Harbour Bridge fare for children was reduced from 2d. to 1d. on 1st January, 1939.

At 30th June, 1947, the fares by Government motor omnibus services were at the rate of approximately 1d. per mile and the fare for children was 1d. for each 8d. or part thereof of the corresponding adult fare.

#### RAILWAY AND TRAMWAY WORKSHOPS.

Workshops have been established to meet the requirements of the various branches of the State railways and tramways. The principal railway shops are situated at Eveleigh, close to the Central Railway Station, and at Chullora, 11 miles distant. There are large workshops at Newcastle, Goulburn, and Bathurst to supply the needs of the permanent-way branch by the preparation of structural steelwork, fish-plates, tools, implements and other articles. Engine repairs are undertaken at Honeysuckle Point (Newcastle) and at a number of smaller workshops in country localities.

The principal tramway workshops are situated at Randwick, in Sydney, and there is a smaller establishment at Newcastle.

Particulars regarding the factories for railway and tramway rolling stock are published in the chapter of this volume entitled "Factories."

#### RAILWAY AND TRAMWAY ELECTRICITY SUPPLY.

For the supply and distribution of electric current to the State railways and tramways there are three main generating stations under the control of the Commissioner for Railways, viz., Ultimo and White Bay in Sydney, and one in Newcastle. A smaller station was opened in January, 1928, at Lithgow, near the State coal mine. A number of substations are in operation throughout the suburban areas.

Particulars regarding the electrical energy generated at each power station and the purposes for which it was used are shown below:—

TABLE 178.—Electricity Generated and Used for Railways and Tramways.

Particulars.	1942-43.	1943-44.	1944-45.	1945-46.
	kilowatt hours.	kilowatt hours.	kilowatt hours.	kilowatt hours.
Units Generated—				
White Bay ...	343,419,220	295,767,520	314,434,500	333,004,900
Ultimo ...	268,356,461	271,822,614	291,289,115	288,662,844
Newcastle ...	224,411,375	265,328,550	267,239,040	262,856,680
Lithgow ...	29,428,135	33,674,805	33,566,671	33,175,105
Units Purchased ...	25,859,729	39,509,931	26,238,708	31,096,582
Total ...	891,474,920	906,103,420	932,768,034	948,796,111
Purpose of Supply—				
Railways ...	359,245,766	368,911,960	377,229,428	380,031,284
Tramways ...	153,322,303	155,585,600	157,128,322	157,993,573
Outside Bodies, etc.	378,906,851	381,605,860	398,410,284	410,771,254
Total ...	891,474,920	906,103,420	932,768,034	948,796,111

## RAILWAYS AND TRAMWAYS—COAL SUPPLIES.

Particulars of coal used in connection with the State railways and tramways in recent years are shown below:—

TABLE 179.—Railways and Tramways, Coal Used, 1928-29 to 1945-46.

Year ended 30th June.	Coal used in Connection with Railways and Tramways.				
	Locomotive Purposes.	Electric Power Stations.	Gas Making.	Other Purposes.	Total.
	tons.	tons.	tons.	tons.	tons.
1929 ...	1,212,272	391,904	7,038	45,719	1,656,933
1932 ...	896,147	332,497	5,744	28,657	1,263,045
1938 ...	1,041,106	434,266	5,565	23,304	1,504,241
1939 ...	994,371	453,300	5,663	24,449	1,477,783
1940 ...	962,197	479,677	5,586	20,843	1,468,303
1941 ...	1,104,122	529,512	5,908	21,503	1,661,050
1942 ...	1,274,056	618,581	6,248	28,659	1,927,544
1943 ...	1,447,122	649,180	6,073	27,416	2,129,791
1944 ...	1,462,085	644,341	6,137	27,354	2,139,917
1945 ...	1,329,000	688,728	5,737	22,329	2,045,794
1946 ...	1,321,606	689,685	5,120	25,236	2,041,773

Coal consumption in 1945-46 was 98,144 tons or 4.6 per cent. less than the record consumption in 1943-44, but was 563,990 tons or 38.2 per cent. greater than in 1938-39.

## EMPLOYMENT AND WAGES IN STATE LAND TRANSPORT SERVICES.

Particulars regarding the number of persons employed in the land transport services of the Government of New South Wales and the amount of salaries and wages paid to them are shown in the following statement. The figures are exclusive of employment on the construction of railways and roads and on the maintenance of roads. The information under the

heading Road Transport Department for 1931-32 and earlier years relates to the tramways only. Employees serving with the defence forces are excluded in 1938-39 and later years; but the statement of salaries and wages paid includes departmental payments to these whilst on active service.

TABLE 180.—State Land Transport Services, Employees and Wages, 1921 to 1946.

Year ended 30th June.	Number of Employees.*			Salaries and Wages Paid.†		
	Railways. Annual Average.	Road Trans- port Dept. at 30th June. ‡	Total.	Railways.	Road Trans- port Dept. ‡	Total.
				£	£	£
1921 ...	37,558	9,018	46,576	9,153,089	2,278,998	11,432,087
1929 ...	43,972	11,121	55,093	12,422,298	3,121,457	15,543,755
1931 ...	40,620	8,388	49,008	10,167,293	2,119,794	12,287,087
1932 ...	40,329	8,356	48,685	9,637,122	2,015,941	11,653,063
1938 ...	41,128	10,530	51,658	10,668,200	2,608,887	13,277,087
1939 ...	41,474	10,503	51,977	11,099,966	2,736,755	13,836,721
1940 ...	39,950	9,984	49,934	10,919,175	2,769,108	13,688,283
1941 ...	42,001	10,550	52,551	12,213,188	2,932,731	15,145,919
1942 ...	45,291	10,674	55,965	14,637,323	3,463,950	18,101,273
1943 ...	47,258	11,057	58,315	17,035,415	3,802,574	20,837,989
1944 ...	48,019	11,140	59,159	18,101,252	3,922,124	22,023,376
1945 ...	49,242	11,405	60,647	17,563,245	3,921,800	21,485,045
1946 ...	53,252	12,282	65,534	18,824,637	4,194,124	23,018,761

\* Excludes employees in defence services in war years. † Includes payments made to staff in defence services in war years. ‡ Since 1937-38 includes staff engaged in registering motor vehicles, etc. (See next chapter.)

#### ACCIDENTS IN STATE TRANSPORT SERVICES.

All accidents are recorded which occur in the working of the State railways, tramways or omnibuses, or on service premises, to persons other than the employees, however slight the injuries may be. In the case of employees all accidents must be reported which cause the employee to be absent from his ordinary work for at least five hours on any of the three days immediately following the day on which the accident occurred.

Particulars of accidents during the last five years (except railway accidents for the years 1941-42 to 1943-44, for which information is not available) are shown in the following table:—

TABLE 181.—State Railways, Tramways and Omnibuses, Accidents, 1939 to 1946.

Year ended 30th June.	Passengers.		Employees.		Others.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
<i>Railway Accidents.</i>								
1945 ...	*	*	22	11,757	126*	797*	148	12,554
1946 ...	*	*	25	11,841	81*	721*	106	12,562
<i>Tramway Accidents.</i>								
1942 ...	17	558	7	1,819	30	316	54	2,693
1943 ...	30	824	4	2,702	36	241	70	3,767
1944 ...	37	599	4	3,237	19	236	60	4,072
1945 ...	10	562	3	3,385	20	206	33	4,153
1946 ...	16	716	6	3,487	23	223	45	4,426
<i>Motor Omnibus Accidents.</i>								
1942 ...	5	221	1	585	9	46	15	852
1943 ...	1	215	...	782	7	6	8	1,003
1944 ...	4	127	...	1,044	7	21	11	1,192
1945 ...	5	482	...	1,179	2	45	7	1,706
1946 ...	3	243	...	1,085	12	40	15	1,368

\* Passenger accidents not recorded separately but included in "Others."

Nearly all the deaths and most of the injuries are due to accidents caused by the movement of vehicles. In the last two years all the deaths in tramway and omnibus accidents except one in 1945-46, were due to such causes. The persons injured in tramway accidents of this kind numbered 3,168 in 1943-44, 3,310 in 1944-45, and 3,478 in 1945-46; in omnibus accidents the numbers were 940, 1,371 and 989 in the respective years.

The amount of compensation paid in respect of injuries to passengers and damage to goods in 1938-39 and the last four years was as follows:—

TABLE 182.—State Railways, Tramways and Omnibuses, Compensation for Accidents, 1939 to 1946.

Accidents.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Railway—	£	£	£	£	£
Passengers, etc.	8,972	4,420	8,429	11,677	10,537
Goods ...	20,882	69,939	127,807	146,168	154,450
Tramway ...	27,940	16,212	20,524	21,822	26,682
Omnibus ...	4,130	8,410	7,042	4,004	7,939
Total ...	61,924	98,981	163,802	183,671	199,608

## MOTOR AND OTHER LICENSED VEHICLES.

Special laws govern the use of motor and other road vehicles. They have been framed with a view to minimising the risk of accident and facilitating the flow of traffic, to promote economy in the organisation of State-owned and commercial transport services and to procure funds for roads and for administration.

The police exercise general authority to take action against dangerous and disorderly traffic and they regulate the street traffic, vehicular and pedestrian, in the Metropolitan and Newcastle districts. Outside these areas municipal and shire councils may enact by-laws for the regulation of street traffic, other than motor traffic.

The speed at which motor vehicles may be driven upon public streets has been limited since December, 1937, to 30 miles per hour within built-up areas, and, unless it be proved that a greater speed was not excessive, to 50 miles per hour elsewhere. Built-up areas are defined generally as those in which provision has been made for street lighting, but streets may be excluded from or included in the definition by direction of the Minister for Transport.

Motor vehicles must be registered if driven upon public streets and horse-drawn vehicles if they ply or stand in a public street for hire. Before registration or renewal of registration, motor vehicles are inspected to ensure that they comply with the requisite standard of fitness. Number plates and registration labels (on motor vehicles) must be displayed on all registered vehicles.

Drivers of motor vehicles are required to be licensed and must pass tests in eyesight, practical driving, and orally in knowledge of the traffic regulations. A license may be refused, suspended or revoked on grounds of physical disability or failure to observe the regulations. In Sydney and Newcastle drivers of public motor vehicles are subjected to tests more severe than those for other drivers.

The normal term of registrations and licenses and renewals thereof is a year, but since 1st December, 1932, quarterly registrations of motor vehicles have been permitted, at the option of the owners.

In terms of the Motor Vehicles (Third Party Insurance) Act, 1942, owners and drivers of motor vehicles must be insured against liability in respect of injury to persons arising out of the use of the vehicles. This provision of the law commenced on 1st February, 1943. Particulars are shown in the chapter "Private Finance."

Under reciprocal arrangements between the States, a private motor vehicle registered in any State may travel freely throughout the Commonwealth, but vehicles entering New South Wales must be insured against third-party risks. In addition, visiting commercial vehicles are subject to the controls normally applied to commercial vehicles in the State visited.

The registration of vehicles, licensing of drivers and collection of various taxes, fees and charges are functions of the Commissioner for Road Transport and Tramways. The police test applicants for drivers' licenses and, by arrangement with the Commissioner for Road Transport and Tramways, they effect the registrations and collect the taxes and fees in certain areas.



Motor vehicles licensed for transporting passengers or goods are subject to special supervision by the Commissioner for Road Transport and Tramways. A service license must be obtained for each privately owned motor omnibus service within the Metropolitan and Newcastle Transport Districts, also a license for each omnibus driver and conductor. The registration of the vehicles is conditional upon compliance with regulations as to design, construction and provision for the safety and comfort of passengers. In the service license are specified the route to be traversed, the time-table to be observed and the fares to be charged. Where a service enters into competition with railway or other transport services, conditions may be imposed to prevent undue competition and overlapping. An annual fee for each service license is fixed in relation to the extent of the benefit conferred on the holder, the nature of the route traversed and the effect of the service on State owned transport services; the maximum annual rate is £4 for each passenger each omnibus is authorised to carry. The fee for experimental, developmental or unprofitable services may be fixed at a nominal sum.

For all motor vehicles used in the State for the conveyance of passengers or goods for hire or in the course of any trade or business a license under the State Transport (Co-ordination) Act may be required in addition to any other license or registration, including the omnibus service license described above. The licensee may be required to pay charges in respect of passengers and goods carried, the maximum charges being 1d. per passenger for each mile or section (whichever is the shorter) or part thereof, or for goods 3d. per ton of the aggregate weight of the vehicle unladen plus its carrying capacity for each mile or part thereof. Vehicles engaged in the carriage of goods to the nearest railway station are not subject to the charge and other exemptions may be granted. Charges are not imposed in respect of journeys not exceeding 50 miles (except in the case of motor omnibuses running in competition with the railways or tramways) nor for the transport of perishable goods to market irrespective of distance.

Taxi-cabs and hire cars throughout the State are controlled to ensure the safety and comfort of passengers.

#### WAR-TIME CONTROL OF MOTOR SPIRIT, RUBBER TYRES AND TUBES, ETC.

##### *Motor Spirit and Substitute Fuels.*

Supplies of petrol and other liquid fuel for motor vehicles have been rationed in terms of National Security Regulations since 1st October, 1940. The ration scales are related to the horse-power of cars and the unladen weight of lorries, as well as the purpose for which the vehicle is used. For business users, the ration is determined according to the needs of the individual as assessed by the Board. Consumers must obtain a license from the State Liquid Fuel Control Board and, in the case of petrol, ration tickets corresponding to the quantity of motor spirit authorised by a license are issued monthly to licensees. Fuels other than motor spirit required for the running of motor vehicles are controlled by license only; ration tickets are not required.

The petrol ration for private motor cars remained at its lowest level for three and a half years from 1st February, 1942, until 27th August, 1945,

after which its severity was gradually relaxed. Variations in the allowances for private motor cars from the inception of rationing up to September, 1947, were as follows:—

TABLE 183.—Petrol Rationing—Private Motor Cars.

Date of Variation.	Monthly Allowance per Car.						
	Up to 8 H.P.	Over 8 to 10 H.P.	Over 10 to 12 H.P.	Over 12 to 14 H.P.	Over 14 to 20 H.P.	Over 20 to 30 H.P.	Over 30 H.P.
	gal.	gal.	gal.	gal.	gal.	gal.	gal.
1940— 1st October	8	11	13	14	16	19	23
1941— 1st April ...	7	8	10	11	12	14	17
1st June ...	5	5	6	7	8	9	11
1st July ...	2	2	3	3	4	5	6
1942— 1st February	1½	2	2½	2½	3	4	4½
1945—27th August ...	2	2½	3	3	4	5	5½
24th Sept. ...	3	4	5	5	6	7	8
1946—29th January	5	6	8	8	9	11	12
1st July ...	7	8	11	11	12	15	16
2nd Dec. ...	8	9	12	12	14	17	18

Concurrently with the introduction of petrol rationing, users of motor vehicles were encouraged to use substitute fuels, *e.g.*, producer gas, town gas or electricity. The number of registered motor vehicles using such fuels in New South Wales in the years 1941-42 to 1944-45 was as follows:—

				Motor Vehicles Using—		
				Producer Gas.	Town Gas.	Electric Batteries.
At 30th June, 1942	...	...	...	8,886	700	47
At 30th June, 1943	...	...	...	15,831	1,889	53
At 30th June, 1944	...	...	...	16,740	2,020	51
At 30th June, 1945	...	...	...	14,280	1,885	43

Reversion to the use of petrol was permitted during 1945 and by 31st January, 1946, the use of producer gas units was negligible and the number of vehicles using town gas had declined to 1,247.

To augment other supplies of charcoal for producer gas the State Government undertook its production in July, 1941. The Commissioner for Road Transport and Tramways took over the Government Charcoal Undertaking in December, 1942, and between that date and 30th June, 1944, the Government kilns produced 47,000 tons of charcoal. In October, 1944, it was decided to curtail production and gradually to close down the kilns.

#### *Control of Rubber Tyres and Tubes.*

The sale of motor tyres and tubes was controlled under National Security Regulations from August, 1942, until 1st September, 1946, and in New South Wales was placed under the administration of the Commissioner

for Road Transport and Tramways on 1st July, 1944. During the year ended 30th June, 1946, applications for the release of tyres and tubes numbered 163,036 and permits for the purchase of 248,018 tyres were issued.

#### *Control of New Motor Vehicles.*

An order of 19th October, 1942, under National Security Regulations made the acquisition of new motor lorries and omnibuses subject to permit from the Commissioner for Road Transport and Tramways as Director of Emergency Road Transport in New South Wales. The control was applied to new motor cars and ex-service cars and lorries as from 8th June, 1943. During 1945-46 permits were issued for 550 new cars and 4,028 lorries, and releases of ex-service vehicles comprised 15 cars and 996 utility lorries. Control over the purchase of omnibuses and lorries of more than 1 ton carrying capacity ceased on 5th August, 1946, and of ex-service vehicles on 1st April, 1947, but permits continued to be required to buy new motor cars and utility vehicles.

#### *Rationalisation of Road Transport Services.*

In 1942 National Security Regulations empowered the Commissioner for Road Transport and Tramways to regulate road transport services to ensure economy in the use of manpower, fuel and vehicles. Rationalisation Transport Committees were set up to organise transport in country districts and steps were taken to organise and control the transport of primary produce, and to restrict taxi-cab, hire car and retail delivery operations. Pools of heavy cartage vehicles were formed in the Sydney and Newcastle areas. Most of these "rationalisation" activities lapsed within twelve months of the ending of hostilities.

#### *Automotive Industry War Advisory Committee.*

To deal with problems arising from the war-time shortages of manpower, equipment, etc., in garages and motor vehicle workshops, an Automotive Industry War Advisory Committee was set up under National Security Regulations during 1942, and functioned until October, 1945.

#### MOTOR VEHICLES—REGISTRATIONS.

As from 1st October, 1939, the renewal of registration, and (since February, 1940) the re-registration after lapse of every motor vehicle has been effected only upon a certificate of inspection as to road-worthiness. Suitable service stations and similar establishments throughout the State are licensed as inspection stations and a number of mechanics employed thereat are licensed as examiners. At 30th June, 1946, there were 1,754 inspection stations and 3,270 licensed mechanics.

The number of vehicles on the register at intervals since 1911 is shown in the following statement. In the use of the figures it should be noted that government motor vehicles, numbering approximately 1,700 in July, 1933, were then included in the records for the first time. Taxi-cabs and omnibuses operating in country districts are included as cars.

TABLE 184.—Motor Vehicles on Register, 1911 to 1946.

End of Month.	Registrations in Force.								
	Car (including Hire Car).	Lorry and Van.	Trailer.	Tractor.	Metropolitan Public Vehicles.*		Cycle.	Trader's Plate.	All Motor Vehicles.
					Taxi- cab.	Omnib- bus.			
1911—Dec. ...	3,975		3		175	4	2,788	...	6,945
1921—Dec. ...	28,865		3,900		407	180	11,291	413	44,866
1929—Dec. ...	170,039		44,868		1,364	612	30,655	2,022	249,500
1932—June ...	143,970		38,618		1,070	362	22,741	417	207,178
1938—June ...	204,598	72,857	5,236	851	1,214	712	24,032	1,118	310,608
1939—June ...	216,050	76,726	6,414	1,035	1,311	777	24,151	1,164	327,628
Aug. ...	216,633	77,639	6,538	1,102	1,331	794	23,905	1,187	329,219
Dec. ...	216,443	77,674	6,913	1,155	1,341	825	23,009	1,194	328,554
1940—June ...	209,510	75,590	7,129	1,209	1,355	823	21,552	1,066	318,234
Dec. ...	207,446	75,644	7,542	1,222	1,357	870	21,275	1,007	316,363
1941—June ...	202,601	75,262	7,857	1,264	1,359	880	20,759	900	310,882
Dec. ...	188,561	75,509	7,058	1,344	1,359	881	18,946	901	295,159
1942—June ...	169,916	71,248	6,965	1,366	1,352	890	15,323	708	267,768
Dec. ...	172,028	71,276	6,818	1,375	1,350	901	14,822	649	269,219
1943—June ...	173,188	72,159	6,873	1,382	1,349	913	14,164	610	270,638
Dec. ...	177,245	75,068	7,409	1,429	1,348	913	14,360	634	278,406
1944—June ...	180,938	78,023	7,621	1,517	1,349	977	14,897	624	285,946
Dec. ...	184,364	80,495	8,501	1,636	1,352	1,018	15,546	642	293,554
1945—June ...	185,451	82,957	9,065	1,746	1,351	1,023	16,068	651	298,312
Dec. ...	188,412	88,670	10,000	1,852	1,362	1,049	17,900	752	309,997
1946—June ...	190,978	97,176	11,087	2,056	1,357	1,069	20,492	848	325,043
Dec. ...	195,453	106,598	12,964	2,177	1,358	1,103	23,490	1,077	344,229

\* Includes Newcastle Transport District in 1932 and later years.

At 31st December, 1946, there were 1,372 vans and 480 hire cars in the Metropolitan and Newcastle Transport Districts. A van is a lorry licensed to carry luggage and furniture and to ply for public hire. Hire cars operate under conditions similar to those of taxi-cabs, but may not ply for hire from public stands.

At 30th June, 1946, there were 6.53 cars and 11.11 motor vehicles of all types per hundred of population, compared with 6.40 and 10.29 per hundred, respectively, a year before and 7.87 and 11.96 per hundred, respectively, before the war in August, 1939.

The number of vehicles on the register reached the pre-war peak of 329,219 in August, 1939, but by October, 1942, had decreased by 62,005 to 267,070, largely owing to petrol rationing. The number then increased, at first slowly, to 298,312 in June, 1945, and then more rapidly, to 344,229 in December, 1946, as the petrol ration became more liberal and conditions generally moved toward a peace-time basis. Of the total increase of 45,917 between June, 1945, and December, 1946, lorries and vans comprised 51.5 per cent., cars 21.8 per cent. and motor cycles 16.2 per cent.

The proportion of vehicles registered for quarterly periods was 14 per cent. in 1933, 30 per cent. in 1940 and 41 per cent. in 1943. Proportionately more cars than commercial vehicles had quarterly registrations. Owners registering quarterly were asked to convert to an annual basis in 1944, and the proportion of quarterly registrations decreased to 15 per cent. at 30th June, 1945, and to 13 per cent. a year later.

The number of tractors on the register was 1,746 in June, 1945, and 2,056 in June, 1946. Tractors used solely on farms are not required to be registered; particulars of farm tractors, numbering 16,359 in March, 1945, and 17,530 in March, 1946, are shown in the chapter "Agriculture" of this volume.

The number of motor vehicles registered in various years since 1929 is shown in the following statement, with separate details regarding registrations of new vehicles and re-registration of old vehicles after lapse; renewals of registration are not included:—

TABLE 185.—Motor Registrations, New and Old Vehicles,  
1928-29 to 1945-46.

Year ended 30th June.	Registrations of Motor Vehicles (excluding renewals).											
	Car.		Lorry and Van.†		Metropolitan Public Vehicles.*				Total (excluding Cycles).		Cycle (new and old).	
					Taxi-cab.		Omnibus.					
	New.	Old.	New.	Old.	New.	Old.	New.	Old.	New.	Old.		
1929	...	30,182	13,558	8,046	4,768	198	237	83	70	38,509		18,633
1932	...	2,788	19,611	805	8,171	1	59	6	43	3,600	27,884	7,933
1937	...	20,554	18,165	9,640	13,130	523	111	111	61	30,828	31,467	7,701
1938	...	23,024	19,174	10,170	12,468	609	102	188	70	33,991	31,814	7,745
1939	...	19,924	19,194	7,712	12,206	569	122	130	68	28,395	31,590	7,007
1940	...	18,842	17,691	6,026	11,508	413	173	91	55	20,372	29,427	6,073
1941	...	5,968	21,790	2,976	10,767	281	238	46	58	9,271	32,353	6,220
1942	...	1,340	15,481	1,716	7,780	92	250	31	57	3,179	23,568	3,595
1943	...	632	19,782	688	7,970	12	369	17	42	1,340	28,163	8,420
1944	...	173	18,718	3,805	7,971	15	321	63	39	4,056	27,049	3,674
1945	...	267	14,560	2,455	8,049	...	289	63	38	2,785	22,936	5,079
1946	...	526	15,237	3,234	16,650	...	246	54	47	3,814	32,180	7,268

\* Registrations in Newcastle District included in 1932 and later years.

† Includes tractors and trailers in 1929, 1932 and 1937.

There was a steep decline in the registrations of new vehicles following the outbreak of war in 1939 and restrictions on the importation of new cars. Registrations of new lorries and vans increased substantially in 1943-44, but up to 30th June, 1946, there was no significant increase in the number of new cars registered.

#### MOTOR DRIVERS' LICENSES.

The development in motor transport facilities is illustrated also by the following statement of the number of annual licenses to drive motor vehicles issued during various years since 1921:—

TABLE 186.—Motor Drivers' and Omnibus Conductors' Licenses,  
1921 to 1946.

Year ended 30th June.	Metropolitan Public Vehicles.*				Car, Van and Lorry Drivers.	Total Drivers.	Cycle Riders.
	Omnibus.		Taxi- cab Drivers.	Hire Car Drivers. ‡			
	Con- ductors.	Drivers.					
1921† ...	200	441	627	...	53,061	54,129	16,115
1931... ..	913	1,977	1,744	...	294,009	297,730	31,946
1938... ..	784	2,182	3,976	...	393,474	399,632	30,477
1939... ..	767	2,488	4,570	...	422,390	429,448	30,923
1940... ..	855	2,544	4,835	...	434,726	442,105	30,490
1941... ..	1,032	2,696	4,528	...	430,919	438,143	30,152
1942... ..	875	1,911	3,893	...	396,500	402,304	25,606
1943... ..	1,161	3,063	3,344	...	384,822	391,229	23,743
1944... ..	1,336	2,723	1,888	626	393,911	399,148	24,304
1945... ..	608	2,549	1,888	833	415,073	420,343	25,963
1946... ..	2,006	3,917	3,417	1,149	477,994	486,477	32,167

\* Newcastle District included in 1931 and later years.

† Calendar year.

‡ Prior to July, 1943, included with car drivers.

The Department estimated that of the 477,994 car and lorry drivers in 1946 approximately 71,000 or 15 per cent. were women.

The following table shows the estimated proportion of drivers of public and private motor vehicles in various age groups in 1946:—

TABLE 187.—Motor Vehicle Drivers in Age Groups, 1946.

Driver Licensed to Drive—	Age Group (Years).							
	16 to 20.	21 to 30.	31 to 40.	41 to 50.	51 to 60.	61 to 70.	Over 70.	All Ages.
	Proportion per cent. in Age Group.							
Omnibus, Taxi-cab, Hire Car ... ..	...	23·7	44·7	20·8	8·8	1·9	0·1	100·0
Car and Lorry ... ..	3·3	22·0	29·7	23·4	15·4	5·4	0·8	100·0

#### MOTOR TAXES, FEES, CHARGES, ETC.

Proceeds of taxes and fees relating to road transport are distributed amongst special funds, viz., the Road Transport and Traffic Fund, Public Vehicles Fund, and State Transport (Co-ordination) Fund, which are under the control of the Commissioner for Road Transport and Tramways, and the funds of the Department of Main Roads. The allocation is as follows:—

*The Road Transport and Traffic Fund* receives fees from the registration of vehicles and licensing of drivers.

*The Public Vehicles Fund* receives annual service license fees payable on motor omnibuses, also taxes on public motor vehicles which ply in the Metropolitan and Newcastle Transport Districts.

*The State Transport (Co-ordination) Fund* receives all collections under the State Transport (Co-ordination) Act, including license fees and charges for the carriage of passengers and goods.

*The funds of the Main Roads Department* receive the taxes on motor vehicles other than those paid to the Public Vehicles Fund.

*Motor Taxes.*—The tax levied on a motor vehicle is paid when the certificate of registration is issued or renewed. The rates of tax are based upon the weight of the vehicle and the type of tyre used, except in the case of motor cycles. When registration is effected quarterly the tax is charged at 27½ per cent. of the annual tax.

The rates of tax were increased by 12½ per cent. as from 1st December, 1939, and reduced by approximately 20 per cent. as from 15th May, 1942. The rates on motor vehicles except those of British manufacture (which are taxed at these rates, less 6d. per ½ cwt.) are as follows:—

	Pneumatic Tyres.		Solid Tyres.
	s.	d.	s. d.
Motor-cycle—solo ... .. each	20	3	.....
with side car or box ..	36	0	.....
Car ... .. per ½ cwt.	2	6	2 11
Omnibus ... ..	3	10	5 0
Lorry, tractor* or other vehicle ... ..	2	6	3 2

\* Maximum tax on a tractor is £13 10s.

Tractors and motor lorries owned by farmers and used solely for carting the produce of their farms are taxable at half-rates.

Vehicles used by traders for trial purposes are exempt from tax. Other exemptions are ambulances, road-making equipment, sanitary and cleansing equipment of local councils, and farmers' or timber cutters' trailers used solely in carting farm produce or timber from forest to mill. Government motor vehicles, other than omnibuses, are exempt from tax and fees but are required to be registered and issued with number plates.

The motor taxes collected during the successive years 1943-44 to 1945-46 amounted to £1,747,223, £1,773,136, and £1,927,326. Of these sums £62,097, £63,073, and £65,866 were credited to the Public Vehicles Fund, and £1,685,826, £1,711,063, and £1,861,460 to the Main Roads Department in the successive years.

*Registration Fees.*—Fees for the registration of motor vehicles are payable when the certificate of registration is issued or renewed. The fees for annual registration are as follows:—Motor cycle, 2s. 6d.; motor omnibus in the Metropolitan and Newcastle Transport Districts, £2; and other motor vehicles, £1. The annual fees for trader's registration, previously £2 for motor cycles and £3 for other vehicles, were reduced to £1 15s. and £7 respectively as from 15th May, 1942. For quarterly registration the annual fee is payable in respect of the first quarter and one-fourth of the annual fee for each subsequent quarter while registration is continuous. The annual fee for horse-drawn vehicles plying for hire within the Metropolitan and Newcastle Transport Districts is £1.

Registration fees amounting to £293,846 in 1943-44, £293,010 in 1944-45, and £321,654 in 1945-46 were paid to the Road Transport and Traffic Fund.

*Drivers' Licenses.*—The annual fee is 10s. for a license to drive a motor vehicle, and 5s. for a license to ride a motor cycle. For learners' permits, current for one month, the fee is 5s. Within the Transport Districts conductors of motor omnibuses and drivers of registered horse-drawn vehicles must be licensed, the annual fees being 10s. and 5s. respectively. Drivers' license fees collected and paid to the Road Transport and Traffic Fund amounted to £214,192 in 1943-44, to £225,570 in 1944-45 and to £267,447 in 1945-46.

*Miscellaneous Fees and Charges.*—Small fees are charged in respect of the transfer and cancellation of registration, replacement of lost and damaged number plates, certificates, etc. These fees, amounting to £13,186 in 1943-44, to £19,070 in 1944-45 and to £19,399 in 1945-46, were paid to the Road Transport and Traffic Fund.

*Service License Fees* are chargeable under the Transport Act, 1930, in respect of motor omnibuses operating in the Transport Districts, as described on page 219. Collections amounting to £11,923 in 1943-44 £12,524 in 1944-45 and £12,861 in 1945-46 were paid to the Public Vehicles Fund.

*Fees and Charges under State Transport (Co-ordination) Act.*—Provisions of this Act governing the licensing of vehicles engaged in the carriage of passengers and goods are outlined briefly on page 219. All collections are paid to the State Transport (Co-ordination) Fund. The license fees vary from 2s. 6d. to 5s. in respect of vehicles, and agents of persons operating road transport services are charged an annual license fee of £1. The license fees amounted to £25,177 in 1943-44, £25,315 in 1944-45 and £28,844 in 1945-46.

Charges imposed in respect of passengers and goods, for which the maximum rates are stated on page 219, amounted to £20,263 in 1943-44, £21,286 in 1944-45 and £39,494 in 1945-46. Of these sums £6,423, £6,928 and £10,468 were charged for passengers in the respective years and £13,840, £14,358 and £29,026 for goods. Other receipts amounted to £377 in 1943-44, £530 in 1944-45 and £1,316 in 1945-46.

The total receipts from taxes, fees and charges during the past ten years are summarised in the following table:—

TABLE 188.—Motor Taxes, Fees, etc.—Receipts, 1936-37 to 1945-46.

Year ended 30th June.	Tax.	Fees for Registration of Vehicles and Licensing of Drivers.	Additional fees, etc., in respect of Commercial Motor Vehicles.			Miscellan- eous Collections— Exchange, Search Fees, etc.	Total Collections.
			License Fees.	Charges for Pas- sengers and Goods.	Other.		
	£	£	£	£	£	£	£
1937 ...	1,750,886	525,815	33,377	42,977	1,406	4,006	2,358,557
1938 ...	1,925,774	572,988	36,071	50,555	1,575	3,951	2,500,914
1939 ...	2,063,150	607,281	37,904	52,789	1,555	4,436	2,767,115
1940 ...	2,165,147	600,415	38,391	54,930	1,860	6,567	2,867,310
1941 ...	2,241,030	587,404	43,617	52,013	1,244	5,407	2,930,715
1942 ...	1,912,927	515,233	42,202	33,166	568	4,665	2,508,761
1943 ...	1,674,813	506,291	40,344	22,014	345	4,567	2,248,374
1944 ...	1,747,223	521,224	37,100	20,263	376	8,748	2,334,934
1945 ...	1,773,136	537,650	37,839	21,287	530	10,822	2,381,264
1946 ...	1,927,326	608,500	41,705	39,493	1,316	4,351	2,622,691

#### DISBURSEMENT OF MOTOR TAXES, FEES, ETC.

Since the commencement of the Transport Act, 1930, motor revenue has been allocated to special funds as described on page 225, and the manner in which these funds may be utilised to meet costs of administration and for other purposes relating to transport, was described on page 393 of the Official Year Book for 1939-40.

Motor taxes and other funds at the disposal of the Department of Main Roads may be expended as described on page 182 of this volume.

The following summary shows the purposes on which revenue derived from road transport vehicles has been expended during the past ten years:—

TABLE 189.—Expenditure from Motor Taxes, Fees, etc., 1937 to 1946.

Year ended 30th June.	Paid to Road Making Authorities.	Provision of Traffic Facilities.	Administra- tion of Traffic and Road Transport (including Regulation by Police).	Paid to Railway and Tramway Funds.	Total.
	£	£	£	£	£
1937 ...	1,914,983	7,134	355,915	67,907	2,345,939
1938 ...	1,923,034	21,954	569,272	52,132	2,566,392
1939 ...	2,048,833	19,982	621,259	106,105	2,796,179
1940 ...	2,156,116	18,720	602,106	66,785	2,843,727
1941 ...	2,232,013	38,800	591,192	67,236	2,929,241
1942 ...	1,907,686	29,400	523,362	7,970	2,468,418
1943 ...	1,677,576	10,282	511,792	44,024	2,243,674
1944 ...	1,794,792	9,142	474,726	33,661	2,312,321
1945 ...	1,888,742	11,512	419,827	36,077	2,356,158
1946 ...	2,068,813	12,935	465,034	39,959	2,586,741



At 30th June, 1946, a credit balance of £346,919 was held in the Public Vehicles Fund and £54,329 in the State Transport (Co-ordination) Fund. These amounts represent revenue collections not yet expended.

The value of services rendered by the police in registering vehicles, licensing drivers, etc., is recouped annually to the Consolidated Revenue Fund; in 1945-46 the amount paid for this purpose from the Road Transport and Traffic Fund was £251,183, and from the State Transport (Co-ordination) Fund £2,000.

#### MOTOR OMNIBUS SERVICES.

Motor omnibus services in the Metropolitan and Newcastle Transport Districts are subject to the provisions of the Transport Act, 1930, and the services in all districts to the State Transport (Co-ordination) Act, 1931. The Commissioner for Road Transport and Tramways licenses services and vehicles, determines conditions and standards of service, and imposes charges and fees.

Particulars of motor omnibus traffic in the Metropolitan district were collected for the first time in 1928-29 and in the Newcastle district in 1930-31. Statistics of the privately owned services are shown in Table 190 and information relating to the Government services which are operated in conjunction with the tramways in Tables 170 to 176.

#### *Private Motor Omnibus Services.*

Motor omnibus services were the province of private operators until the inauguration of the first Government service in 1932. The rapid growth of this form of transport in unregulated competition with State-owned tramways and railways led to a revision of the transport laws in 1930 and 1931, and the private omnibus traffic was considerably curtailed by the elimination of overlapping services.

Particulars of the private motor omnibus services in the Metropolitan and Newcastle districts in 1930-31 and in each year since 1938-39 are shown in the following table:—

TABLE 190.—Private Motor Omnibus Services, Metropolitan and Newcastle.

Year ended 30th June.	Services. *	Omnibuses in Service. *	Bus Miles Run.	Passengers Carried.	Book Value of Plant. *	Revenue.	Expenditure.
<b>Metropolitan Transport District.</b>							
	No.	No.	Thousand.		£	£	£
1931 ...	219	483	19,548	92,125	486,797	1,357,505	1,352,649
1939 ...	135	275	7,463	27,754	167,396	363,776	338,314
1940 ...	132	272	7,525	28,845	169,633	371,795	356,243
1941 ...	131	288	8,003	32,278	176,613	421,195	384,055
1942 ...	131	299	8,123	40,447	195,104	496,279	435,023
1943 ...	131	381	8,309	46,940	224,260	640,463	509,168
1944 ...	131	348	8,404	49,918	283,940	658,034	578,206
1945 ...	134	358	9,234	54,866	311,715	717,094	641,813
1946 ...	146	393	10,500	61,349	391,747	809,613	726,691
<b>Newcastle Transport District.</b>							
	No.	No.	Thousand.		£	£	£
1931 ...	64	83	3,113	8,248	76,448	140,110	139,914
1939 ...	21	42	964	1,940	26,637	42,018	35,862
1940 ...	21	40	1,048	1,971	29,770	46,212	44,711
1941 ...	24	37	1,152	2,441	40,807	61,409	54,970
1942 ...	24	47	1,931	3,458	53,381	88,763	75,671
1943 ...	24	64	1,640	4,195	61,033	100,291	96,507
1944 ...	24	54	1,689	4,201	66,558	102,871	97,472
1945 ...	24	55	1,639	4,608	81,249	119,165	114,015
1946 ...	26	63	1,545	4,810	75,009	135,412	128,640

\* As at 30th June.

*Public Passenger Vehicles in Country Districts.*

Particulars of omnibus traffic in country areas are not collected. The number of public passenger vehicles operating in country districts in each of the last ten years is shown below:—

TABLE 191.—Public Passenger Vehicles in Country Districts, 1937 to 1946.

At 30th June.	Omnibuses.	Tourist Vehicles.*	Taxi-cabs.	Hire Cars.
1937 ... ..	873†	141	‡	‡
1938 ... ..	891†	153	491	1,145
1939 ... ..	653	99	554	855
1940 ... ..	656	105	627	729
1941 ... ..	680	47	675	633
1942 ... ..	687	8	652	633
1943 ... ..	735	...	619	470
1944§ ... ..	783	...	612	464
1945 ... ..	868	...	630	450
1946 ... ..	960	71	765	511

\* Metropolitan and country.

† Includes cars and lorries operating in services.

‡ Not available.

§ 30th September.

All of these vehicles are included in car registrations shown in Table 185. Also included in car registrations are 364 cars and 837 lorries licensed at 30th June, 1946, to operate in services for the carriage of goods (mostly mail) and limited numbers of passengers. Tourist vehicles, catering specially for tourists, were restricted severely in the early war years and suspended from operation from 1942-43 to 1944-45.

## ROAD ACCIDENTS.

The statistics of road accidents in New South Wales are based upon reports made by the police and supplementary information which in recent years has been gleaned from evidence given at Coroners' inquiries and other sources. Many accidents of a minor nature are not reported.

An analysis of the traffic accidents reported in each year is made by the Commissioner for Road Transport and Tramways and from this the information shown in the following tables has been obtained.

The number of accidents reported in the last ten years, and the casualties resulting therefrom, are shown below:—

TABLE 192.—Road Accidents, 1936-37 to 1945-46.

Year ended 30th June.	Accidents reported.	Casualties.							
		County of Cumberland.		Newcastle Transport District.		Balance of State.		Total, N.S.W.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1937 ...	11,460	304	5,614	27	320	216	1,750	547	7,684
1938 ...	12,575	324	6,080	29	382	259	2,153	612	8,615
1939 ...	11,906	275	5,759	35	439	242	2,190	552	8,388
1940 ...	11,202	298	5,624	21	407	228	2,367	547	8,398
1941 ...	10,548	258	5,286	24	281	189	1,904	471	7,471
1942 ...	7,775	273	3,991	27	257	180	1,300	480	5,548
1943 ...	7,085	257	3,717	20	204	152	1,175	429	5,096
1944 ...	6,955	233	3,534	15	138	124	1,047	372	4,719
1945 ...	7,889	222	3,911	15	146	133	1,294	370	5,351
1946 ...	10,565	257	5,223	25	213	201	1,906	483	7,342

Road accidents reached their highest number (12,575) in 1937-38, causing 612 deaths and injury to 8,615 persons. The number declined slightly in 1938-39, and steeply during the war years, as the number of registrations and the use of motor vehicles decreased because of severe petrol rationing. In 1943-44 there were 6,955 accidents which caused 372 deaths and injury to 4,719 persons. The subsequent increase in road traffic, as petrol allowances were made more liberal, was accompanied by a disproportionate increase in accidents. Whereas the average number of vehicles on the road increased in 1945-46 (to 311,299) by 6.2 per cent. the increase in accidents over those in 1944-45 was 33.9 per cent.

Particulars regarding the number of persons killed and injured in relation to the number of vehicles registered (disregarding the mileage travelled) and the population are shown in the following table:—

TABLE 193.—Road Casualties, Ratio to Vehicles Registered and to Population, 1936-37 to 1945-46.

Year ended, 30th June.	Per 1,000 Vehicles Registered.			Per 10,000 Population.		
	Killed.	Injured.	Total Killed and Injured.	Killed.	Injured.	Total Killed and Injured.
1937 ...	2.00	28.20	30.20	2.02	28.64	30.66
1938 ...	2.08	29.29	31.37	2.21	31.80	34.01
1939 ...	1.74	25.60	27.34	2.02	30.68	32.70
1940 ...	1.67	25.62	27.29	1.98	30.42	32.40
1941 ...	1.50	23.80	25.30	1.69	26.85	28.54
1942 ...	1.66	19.21	20.87	1.71	19.80	21.51
1943 ...	1.60	18.97	20.57	1.52	18.00	19.52
1944 ...	1.33	16.95	18.28	1.30	16.53	17.83
1945 ...	1.26	18.24	19.50	1.28	18.55	19.83
1946 ...	1.55	23.59	25.14	1.66	25.20	26.86

An analysis of accidents according to the type of vehicle involved in them shows that in 1945-46 collisions of motor vehicles and motor cycles with other vehicles, persons or objects were responsible for 81.8 per cent. of the accidents with casualties, 83.6 per cent. of the deaths and 84.8 per cent. of the persons injured. Details are given in the statement hereunder:

TABLE 194.—Road Accidents, Type of Vehicle Involved, 1945-46.

Type of Accident.	Accidents with Casualties.			Accidents without Casualties *	Total Accidents.
	Accidents.	Number of Persons.			
		Killed.	Injured.		
Motor vehicle and—					
Motor vehicle ... ..	732	36	1,270	3,015	3,747
Motor cycle ... ..	479	35	568	132	611
Pedal cycle ... ..	622	41	612	81	703
Tramcar ... ..	145	5	252	728	873
Trolley bus ... ..	...	...	...	6	6
Train ... ..	11	5	25	9	20
Pedestrian ... ..	1,637	140	1,609	9	1,646
Horse-drawn vehicle ... ..	53	3	69	66	119
Horse (ridden) ... ..	20	3	18	8	28
Any other object ... ..	698	107	1,288	580	1,278
Total ... ..	4,397	375	5,711	4,634	9,031
Motor cycle and—					
Motor cycle ... ..	18	1	24	2	20
Pedal cycle ... ..	46	1	69	2	48
Tramcar ... ..	4	...	5	3	7
Pedestrian ... ..	165	13	197	...	165
Horse-drawn vehicle ... ..	16	...	18	3	19
Any other object... ..	168	14	203	8	176
Total ... ..	417	29	516	18	435
All other road accidents ... ..	1,075	79	1,115	24	1,099
Grand Total ... ..	5,889	483	7,342	4,676	10,565

\* As recorded; many minor accidents are not reported.

Most accidents for which drivers are responsible are due to negligence, excessive speed or failure to observe the traffic regulations. Accidents due to excessive speed or intoxication of the driver are usually more serious than those caused by inattentive driving. In 1945-46 inattentive driving caused 380 accidents and 23 deaths, whereas excessive speed resulted in 352 accidents and 80 deaths and intoxication of driver in 197 accidents and 26 deaths. Most accidents caused by pedestrians are due to carelessness.

The following statement shows the principal causes of accidents resulting in casualties which occurred in 1945-46.

TABLE 195.—Principal Causes of Road Accidents involving Casualties,  
1945-46.

Cause.	Accidents Reported.	Number of Persons—	
		Killed.	Injured.
<b>Drivers or riders—</b>			
Inattentive driving ... ..	380	23	481
Excessive speed ... ..	352	80	561
Failure to give right of way ... ..	349	14	503
Turning corner on wrong side ... ..	228	7	293
Driver or rider intoxicated ... ..	197	26	312
Not keeping to left ... ..	177	14	284
Negligence at intersection ... ..	171	11	195
Swerving to avoid vehicle or person ... ..	163	5	226
Other causes ... ..	898	81	1,187
Total ... ..	2,915	261	4,042
<b>Vehicles—</b>			
Defective mechanism, tyres or lights ... ..	341	25	559
Other causes ... ..	22	.....	29
Total ... ..	363	25	588
<b>Pedestrians—</b>			
Pedestrian or passenger intoxicated ... ..	340	15	337
Crossing roadway carelessly ... ..	300	30	283
Children playing in roadway ... ..	282	24	267
Passing behind or in front of vehicle ... ..	246	12	243
Boarding or alighting from vehicle in motion ... ..	269	9	261
Other causes ... ..	749	80	715
Total ... ..	2,186	170	2,106
<b>Person falling from moving vehicle ... ..</b>	86	5	81
<b>Road faults, shying horses and other causes ... ..</b>	339	22	525
<b>Grand Total ... ..</b>	<b>5,889</b>	<b>483</b>	<b>7,342</b>

Occupants of vehicles outnumber other persons killed and injured in road accidents, though pedestrians represent more than one-third of the fatal cases, and the number of pedal cyclists is relatively high. The number of persons affected, classified into these three groups, is shown below:—

TABLE 196.—Road Accidents, Classification of Persons Killed and Injured.

[illegible]

The proportion of deaths in each of these classes to total deaths in the road accidents during the past ten years was as follows:—Drivers and passengers 53.6 per cent.; pedestrians 34.6 per cent.; pedal cyclists, 11.8 per cent. Of the persons injured the proportions in these groups were 58.7 per cent.; 27.4 per cent.; and 13.9 per cent., respectively.

#### ROAD SAFETY COUNCIL OF NEW SOUTH WALES.

A Road Safety Council of New South Wales was established in September, 1937, with the object of interesting all sections of the community in the prevention of road accidents. The Minister for Transport is President of the Council and the Government provides funds to meet its expenses. As from 1st July, 1947, these funds will be supplemented by Commonwealth grants under the Aid Roads and Works Act. The Council undertakes road safety activities including publicity campaigns and the issue of propaganda.

A comprehensive system of road signs and traffic lines on major highways, maintained by the Departments of Main Roads and Road Transport and Tramways, contributes materially to the safe use of the roads.

## PUBLIC FINANCE.

The collection and expenditure of public moneys in New South Wales are controlled by four authorities, viz.:—(1) The Government of the State of New South Wales; (2) the Government of the Commonwealth of Australia; (3) the Municipal, Shire, and County Councils (local governing bodies operating in defined areas); and (4) statutory bodies appointed by the Government to administer such public services as railways, tramways, water and sewerage, Sydney harbour, irrigation, and main roads.

The governmental revenue of the State Government is derived mainly from Commonwealth contributions under the uniform taxation laws and the Financial Agreement; State taxes; the State lottery; and the sale and leasing of its lands and forests. The expenditure of the State on governmental account includes the cost of such services as education, public health, law and order, social aid, navigation (in part), water conservation and irrigation, administration of land, agriculture, mining, fisheries, and factory laws, and the development and maintenance of the resources of the State, also public debt charges (in so far as they are not borne by State undertakings).

The governmental revenue of the Commonwealth Government is derived largely from customs and excise duties and income tax. Its expenditure is mainly in connection with war, defence and repatriation services, social services, including age and invalid pensions, maternity and child allowances and unemployment and sickness benefits; navigation (in part); bounties on production; the control of customs; post office; representation abroad; meteorological services; certain legal services; payments to the States, and public debt charges.

Local governing bodies levy rates on the capital value of lands within the areas administered by them. They provide minor services to meet local needs, such as streets and roads, recreation areas, the supervision of building operations, and, in some cases, the provision of public services. In general the cost of these services is defrayed from the rates but charges are imposed for special services rendered.

The revenue of the statutory bodies administering railways, tramways, Sydney harbour works, etc., is derived almost entirely from charges for the use of services which they administer, and all are ultimately subject to the control of the Government. Revenue by way of motor taxes is used for the most part by the Main Roads Department on the construction and maintenance of roads throughout the State.

Both State and Federal Governments have power to raise loans on their own security subject to approval by the Australian Loan Council. The constitution of the sinking fund and the management of the public debt are regulated by the Financial Agreement between the Commonwealth and States, which is described on page 285 hereof.

Municipalities, county councils, shires, and boards administering water supply services in the Metropolitan and Hunter districts and in Broken Hill have power to raise loans under certain conditions. Such loans are subject to the approval of the Governor and (if in excess of £100,000) of the Australian Loan Council.

*Taxation.*

The following statement shows particulars of taxation collected in New South Wales by State instrumentalities during the five years ended 30th June, 1946. State income tax collected after 1941-42 consists of arrears of tax only. Receipts from Commonwealth reimbursements under the uniform income tax and entertainments tax schemes, described later, are shown at the foot of the table.

TABLE 197.—State and Local Taxation in New South Wales.

Head of Taxation or Charge.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46
STATE.	£	£	£	£	£
Income Tax ... ..	16,935,928	4,347,457	797,747	526,010	471,791
Family Endowment Tax ...	98	267	63	319	184
Land Tax ... ..	2,137	2,130	3,140	2,283	2,326
Probate ... ..	2,775,752	2,882,050	2,710,824	2,779,573	3,317,401
Stamp Duties... ..	1,446,042	1,203,885	1,214,661	1,337,285	1,653,851
Entertainments and Race- courses Admission Taxes ...	160,830	46,907	.....	.....	.....
Other Racing and Betting Taxes ... ..	338,578	329,329	547,457	686,693	881,898
Liquor Licenses ... ..	565,714	631,205	627,609	686,904	751,923
Other Licenses ... ..	69,008	67,749	65,091	63,099	66,490
Total Governmental Taxation	22,294,087	9,510,979	5,966,592	6,082,166	7,145,864
Motor Tax, Licenses, etc.*—	2,504,095	2,243,807	2,326,186	2,370,442	2,618,341
Total, State Taxation	24,798,182	11,754,786	8,292,778	8,452,608	9,764,205
LOCAL RATES †					
Municipalities, etc. †					
General Services ... ..	5,796,255	5,864,778	5,902,497	5,914,529	6,063,516
Water Sewerage, etc. ...	557,668	574,014	582,945	583,185	595,373
Special Boards—					
Water, Sewerage, Drainage	3,139,073	3,257,163	3,337,123	3,377,615	3,429,008
Total Local Rates	9,492,996	9,695,955	9,822,565	9,875,329	10,087,897
Total State and Local	34,291,178	21,450,741	18,115,343	18,327,937	19,852,102
Commonwealth Reimburse- ments—Uniform Tax	.....	11,266,758	14,719,083	14,990,820	15,045,039

\* Motor taxes, etc., are credited to special Road and Transport Funds. (See page 263.)

† Particulars revised by exclusion of various charges not strictly definable as taxation.

† Year ended 31st December preceding.

The amount of Federal taxation which is borne by the people of New South Wales cannot be determined definitely. Portion of customs and excise revenue collected in the State relates to goods consumed in other States. Federal land and income taxes paid by persons owning property and deriving income in more than one State are included in assessments made by the Central Office, and are not allocated to the individual States. The average amount of Federal taxation per head of population in the Commonwealth was £25 2s. 10d. in 1941-42. In later years Federal taxation included receipts under the uniform income and entertainments tax schemes: total collections amounted to £35 9s. 8d. per head of population in 1942-43, £41 10s. 6d. in 1943-44, £45 15s. 1d. in 1944-45, and £47 7s. 3d.



in 1945-46; the net amount of taxation retained by the Commonwealth, after reimbursing the States, was £31 14s. 8d., £37 0s. 2d., £41 4s. and £42 15s. 4d. in the respective years.

*Taxation per Head of Population.*

The amounts stated in Table 197 are shown below at their equivalent rates per head of population:—

TABLE 198.—State and Local Taxation per Head of Population.

Head of Taxation, or Charge.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
STATE.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Income Tax ... ..	6 0 10	1 10 9	0 5 7	0 3 8	0 3 3
Probate ... ..	0 19 10	1 0 4	0 19 0	0 19 3	1 2 10
Stamp Duties ... ..	0 10 4	0 8 6	0 8 6	0 9 3	0 11 4
Entertainments and Race- courses Admission Taxes ...	0 1 2	0 0 4	.....	.....	.....
Other Racing and Betting Taxes	0 2 5	0 2 4	0 3 10	0 4 9	0 6 1
Liquor Licenses ... ..	0 4 1	0 4 5	0 4 5	0 4 10	0 5 2
Other Licenses ... ..	0 0 6	0 0 6	0 0 6	0 0 5	0 0 6
Total Governmental Taxation	7 19 2	3 7 2	2 1 10	2 2 2	2 9 2
Motor Tax, Licenses, etc. ...	0 17 10	0 15 10	0 16 4	16 5	0 17 11
Total State Taxation ... ..	8 17 0	4 3 0	2 18 2	2 18 7	3 7 1
LOCAL RATES.					
Municipalities, etc.*—					
General Services ... ..	2 1 4	2 1 5	2 1 4	2 1 0	2 1 8
Water, Sewerage, etc. ...	0 4 0	0 4 1	0 4 1	0 4 1	0 4 1
Special Boards—					
Water, Sewerage, Drainage ...	1 2 5	1 3 0	1 3 4	1 3 5	1 3 6
Total Local Rates ... ..	3 7 9	3 8 6	3 8 9	3 8 6	3 9 3
Total State and Local ... ..	12 4 9	7 11 6	6 6 11	6 7 1	6 16 4
Commonwealth Reimburse- ments—Uniform Tax ... ..	.....	3 19 7	5 3 1	5 3 11	5 3 4

\* Amounts for year ended 31st December preceding.

STATE TAXES.

*State Land Tax.*

State land tax is levied only on freehold tenures in the unincorporated districts of the Western Division where local rates are not imposed. The rate of tax is 1d. in the £ on the unimproved value of such lands. For the purpose of assessment a statutory deduction of £240 is made from the assessed value of the lands held by each individual. The amount of land tax collected in the year ended 30th June, 1946, was £2,326.

*State Income Tax.*

Taxation on incomes was levied by the State of New South Wales from 1896 to 1941-42, the tax in the last year being levied on income derived in 1940-41. The State tax was discontinued in accordance with the Commonwealth uniform income tax plan described at page 239.

The amount receivable by the State under the uniform income tax plan was fixed at £15,356,000 annually from 1942-43 to 1945-46, comprising arrears of State income tax collected and the balance as reimbursement grant by the Commonwealth. The receipts from each source were as follows:—

	1942—43.	1943—44.	1944—45.	1945—46.
	£	£	£	£
Commonwealth Reimbursement Grant ... ..	11,146,135	14,558,253	14,829,990	14,884,209
Arrears of State tax collected	4,209,865*	797,747	526,010	471,791

\*Excludes £137,592 collected in 1941-42, but not credited until 1942-43.

### *State Probate Duties.*

Probate Duties have been imposed by the State continuously since 1880. The tax is payable on assessment or within six months after the death of the deceased. Rates and incidence of the tax were altered in 1921, 1931, 1933 and 1939.

Estates of members of the Naval, Military and Air Forces of the British Empire and Allies who died during World War II or within a year thereafter, as a result of injuries received or disease contracted on active service, have been exempted.

The dutiable value of an estate is the assessed value of all property of the deceased situated in New South Wales at his death, and in case of deceased persons domiciled in New South Wales at death, personal property outside New South Wales.

Whether deceased was or was not domiciled in New South Wales at the time of his death, his estate includes every specialty debt secured to him over property in New South Wales. Where duty is paid on personal property situate in any part of His Majesty's Dominions outside New South Wales, a refund is allowed of the duty paid in the Dominions or the duty paid in New South Wales, whichever is the less.

Deductions are allowed in respect of all debts actually due and owing by deceased.

Probate duty is levied under several scales of rates graded according to the value of the estate, and the rates rise with each additional £1,000 of value to the maximum where the value exceeds £100,000 if the deceased was domiciled in New South Wales, or £75,000 if domiciled elsewhere at death. The lowest scale applies to bequests of a philanthropic nature, as specified in the Stamp Duties Act; and there are separate scales for property of persons domiciled in New South Wales at date of death, which passes to beneficiaries within certain degrees of kinship. Where different scales apply to various portions of an estate, duty under each scale is calculated according to the rate applicable to the total amount of the estate. For example, if the dutiable value of the estate of a person with local domicile at death is valued at £10,000, the rate of duty on the portion passing to public hospitals, etc., is 4½ per cent.; on the portion passing to widow or lineal issue 5½ per cent., or to widower, brother or sister or issue of such, 7½ per cent.; and on other property 10½ per cent. Duty is not charged on estates of persons with New South Wales domicile if the value does not exceed £500, nor on property passing to widow or children under 21 years of age if the value of the estate does not exceed £1,000.

The rate of duty payable under the various scales where the date of death was 7th November, 1939, or later are shown in the following table:—

TABLE 199.—State Probate Duties (N.S.W.)—Rates.

Final Balance of Estate.	Rates of Duty Payable on Property—			
	Passing to public hospital or trust for poor relief or education in New South Wales. A.	Passing to widow or lineal issue of deceased. * B.	Passing to widower, lineal ancestor, brother or sister or issue of brother or sister. C.	Other.
£	Per cent.	Per cent.	Per cent.	Per cent.
<i>Domicile in New South Wales.</i>				
501 to 1,000 ...	2	3	5	8
	Rising by $\frac{1}{3}$ † per cent. per £1,000 to—			
3,001 to 4,000 ...	2 $\frac{2}{3}$	4	6	9
	Rising by $\frac{1}{4}$ † per cent. per £1,000 to—			
60,001 to 61,000 ...	17	18 $\frac{1}{2}$	20 $\frac{1}{2}$	23 $\frac{1}{2}$
	Rising by $\frac{1}{4}$ † per cent. per £1,000 to—			
75,001 to 76,000 ...	20	22	24	27
	Rising by $\frac{1}{5}$ † per cent. per £1,000 to—			
100,001 and over ...	25	27	29	32
<i>Domicile outside New South Wales.</i>				
500 or under ...	3		8	
501 to 1,000 ...	3 $\frac{1}{3}$		8 $\frac{1}{3}$	
	Rising by $\frac{1}{3}$ per cent. per £1,000 to—			
50,001 to 51,000 ...	20		25	
	Rising by $\frac{1}{3}$ † per cent. per £1,000 to—			
65,001 to 66,000 ...	23		30	
	Rising by $\frac{1}{5}$ per cent. per £1,000 to—			
75,001 and over ...	25		32	

\* Lower rates may be charged if estate does not exceed £5,000, see below.

† The rate in column A rises by  $\frac{1}{3}$  per cent. per £1,000. ‡ The rate in column A rises by  $\frac{1}{5}$  per cent. per £1,000.

Provision is made for abatement of duty, where necessary, so that the value of the estate will not be reduced by the tax below the value (less duty) of an estate of the highest value taxable in the next lower grade.

If the value of an estate—local domicile—does not exceed £5,000, property passing to widow and/or children under 21 years of age is dutiable as follows:—

Final Balance of Estate—	Rate of Duty.
£	
501 to 1,000 ...	Exempt.
1,001 to 2,000 ...	$\frac{1}{3}$ rates in Column B of Table 199.
2,001 to 3,000 ...	$\frac{1}{5}$ " " "
3,001 to 4,000 ...	$\frac{1}{4}$ " " "
4,001 to 5,000 ...	$\frac{1}{5}$ " " "

Particulars of the amount of probate duty collected in each of the past five years are shown in Table 197. The number and value of estates assessed annually are shown in the chapter of this Year Book relating to "Private Finance," and in greater detail in the Statistical Register of New South Wales.

*State Stamp Duties.*

Stamp Duty is imposed on a considerable number of legal and commercial documents, as described in the 1939-40 issue of the Year Book. The rates of certain stamp duties were increased as from 7th November, 1939.

The amount of Stamp Duty collected in each of the past five years is shown in Table 197.

*State Taxes on Racing and Betting.*

Taxes in respect of horse and greyhound racing and trotting contests include taxes on racing clubs and associations and on bookmakers which were first imposed by the Finance (Taxation) Act, 1915.

Taxes in respect of racing clubs are levied on license or registration fees received from bookmakers. The existing rates of tax range from 50 per cent. of the fees for racecourses within 40 miles of the General Post Office, Sydney, to 20 per cent. in respect of other racecourses.

Greyhound racing clubs which conduct meetings within 40 miles of the General Post Office Sydney are required to pay tax at the rate of 15 per cent. on their gross income arising out of the conduct of these meetings.

Taxes payable by bookmakers comprise a registration tax, stamp duty on bets made, and a tax on the total amount of bets.

The registration tax is payable in respect of the licences issued by the racing clubs and associations, to entitle bookmakers to operate on various racecourses or groups of racecourses.

Stamp duty is payable on betting tickets issued by bookmakers; also on the number of credit bets made, at the same rate as if tickets were issued. Since the 1st October, 1932, the rates have been one penny for each ticket issued in the saddling paddock and one-halfpenny in the other parts of the racecourse.

A tax on bookmakers' turnover has been charged since 1st October, 1932, as a percentage levy on the total amount of bets made by backers. The rate was first fixed at 1 per cent., reduced to  $\frac{1}{4}$  per cent. on 1st January, 1938, and increased to  $\frac{1}{2}$  per cent. on 4th November, 1939.

Totalisator Tax is payable by registered racing clubs and associations which, when directed by the Government, must establish an approved totalisator on the racecourses at which they hold race meetings. Commission is deducted by the club concerned from the total amount invested by patrons, a proportion being paid as tax to the Treasury and the balance retained by the club.

Since 1st January, 1938, the rate of commission has been 10 per cent. of the investments. The Government's share is 5 per cent. in respect of metropolitan meetings (except trotting) and 2 per cent. elsewhere, also unpaid fractions and unclaimed dividends; and the clubs retain 5 per cent. and 8 per cent., respectively.

The following table shows the total amount of taxation collected by the State in connection with betting, horse and greyhound racing in the last eight years; the statement includes tax on admission to racecourses, which was discontinued in October, 1942, on the introduction of the uniform entertainments tax plan.

TABLE 200.—State Taxes on Racing and Betting, 1939 to 1946.

Year ended 30th June.	Racing Clubs and Associations.	Book-makers Licenses.	Book-makers Turnover.	Betting Tickets.	Totalisator.	Race-courses Admissions.†		Total.
						Greyhound Meetings (Sydney and Newcastle).	Other Meetings (Entertainments Tax).*	
	£	£	£	£	£	£	£	£
1939	94,125	35,579	53,483	58,996	94,155	14,371	44,716	395,425
1940	91,622	32,749	80,454	55,142	102,508	13,104	50,130	425,709
1941	84,121	30,462	98,888	55,365	121,771	14,160	49,706	454,473
1942	65,779	31,409	82,369	46,421	112,600	10,348	49,644	398,570
1943	40,969	31,134	73,863	40,295	143,068	1,723†	24,811†	355,863
1944	49,483	34,894	142,515	57,877	262,687	...	...	547,456
1945	65,315	41,874	182,464	65,053	331,987	...	...	686,693
1946	76,134	44,833	257,972	77,570	425,389	...	...	881,898

\* Calendar year ended six months earlier.

† Discontinued on 1st October, 1942.

Collections by the Commonwealth of entertainments tax on admissions to race meetings in New South Wales amounted to £81,371 in the nine months ended 30th June, 1943, £168,013 in 1943-44; £184,479 in 1944-45, and £237,125 in 1945-46; these amounts are exclusive of tax on periodical and season tickets.

Further references to taxes on betting and racing are contained in the chapter "Social Condition."

#### *State Entertainments Tax.*

The tax on admissions to entertainments imposed by the State Government as from 1st January, 1930, was discontinued on 1st October, 1942, in accordance with the uniform tax plan described below.

#### *State Motor Taxes.*

Taxes are levied by the State on motor vehicles, and fees and charges are imposed in respect of motor transport services and the registration and licensing of vehicles and drivers in terms of the Motor Vehicles (Taxation) Act, the Motor Tax Management Act, the Transport Act, and the State Transport (Co-ordination) Act. Details as to the rates of taxes, fees and charges, the amounts collected and their allocation among the various road and transport funds are shown in the chapter "Motor and Other Licensed Vehicles" of this Year Book. See also Tables 197 and 214 in this chapter.

#### COMMONWEALTH TAXES.

##### *Uniform Income Tax and Entertainments Tax.*

Plans to achieve uniformity in the taxation of incomes and entertainments throughout Australia were adopted in 1942, and the Commonwealth became the sole authority levying these taxes. Formerly the Commonwealth and each of the States levied separate taxes on incomes and each of the States, except Queensland, taxed entertainments.

The uniform income tax, introduced as from 1st July, 1942, was first levied on income derived in 1941-42. The uniform entertainments tax operated as from 1st October, 1942. Initially the plans were devised as

temporary war-time measures. In 1946, however, the Commonwealth passed legislation continuing the uniform income tax indefinitely, and the uniform entertainments tax has been continued in practice.

The States are reimbursed for vacating these fields of taxation by annual grants from the Commonwealth. Separate reimbursement grants were paid in respect of each tax until the end of 1945-46, when provision was made for the payment of an annual grant covering both taxes. Payment of these grants is conditional upon a State refraining from levying tax on incomes; a similar restraint upon State taxation of entertainments was suspended as from 1st July, 1946.

In each year, 1942-43 to 1945-46, each State received as reimbursement under the uniform income tax a fixed sum calculated on the basis of its average receipts from income tax in the two years ended 30th June, 1941, and additional grants were paid to some of the States in respect of 1944-45 and 1945-46. Under the uniform entertainments tax each State was paid an annual grant equal to its collections from entertainments tax in 1941-42.

The scale of reimbursement was increased under the legislation of 1946 and provision was made in 1947 for the payment of an annual supplementary grant.

Under the 1946 plan a sum of £40,000,000 is to be distributed amongst the States in each of the years 1946-47 and 1947-48, and in later years the amount will be varied to allow for growth of population and for changes in costs as reflected by the level of wages. In 1948-49 and each subsequent year the distributable amount will be £40,000,000 increased by the percentage increase in population of all the States between 1st July, 1947, and 1st July of the year in question, and that sum increased by a percentage equal to one-half of the percentage increase, if any, in average wages per person employed between 1946-47 and the financial year preceding the year in question.

The annual reimbursements in the years 1942-43 to 1947-48 and their distribution amongst the States are shown in the following table; the amounts for 1947-48 are as increased by the 1947 provisions, described later:—

TABLE 201.—Reimbursements to States under Uniform Taxation,  
1942-43 to 1947-48.

State.	Annually, 1942-43 to 1945-46.			1946-47.*	1947-48.*	Prop'n of Total, 1946-47 and 1947-48.
	Income Tax.		Entertain- ments Tax. †			
	Basic Grant. *	Additional Grant (1945-46 only).				
	£	£	£	£	£	%
New South Wales	15,356,000	.....	160,830	16,477,000	18,537,000	41·19
Victoria ... ..	6,517,000	.....	373,259	8,860,000	9,967,000	22·15
Queensland ... ..	5,821,000	.....	.....	6,601,000	7,426,000	16·50
South Australia ...	2,361,000	1,101,365‡	97,043	3,458,000	3,890,000	8·65
Western Australia	2,546,000	912,559	98,186	3,384,000	3,807,000	8·46
Tasmania ... ..	888,000	118,996	36,469	1,220,000	1,373,000	3·05
Total ... ..	33,489,000	2,132,920‡	765,787	40,000,000	45,000,000	100·00

\* Total reimbursement, comprising Commonwealth grant and arrears of State income tax collected  
 † Proportionate grants for nine months Oct. to June 1942-43, totalled £574,341. ‡ In 1944-45  
 an additional grant of £553,172 was paid to South Australia.

After 1947-48 the aggregate reimbursement as determined under the 1946 plan is to be distributed amongst the States in the following manner:—

- (a) In nine years, 1948-49 to 1956-57: a part of the total diminishing by one-tenth yearly from nine-tenths in 1948-49 to one-tenth in 1956-57 is to be allocated in the same proportions as the sum of £40,000,000 in 1946-47. The balance (i.e., one-tenth in 1948-49, rising to nine-tenths in 1956-57) is to be distributed in proportion to the populations of the States as adjusted<sup>(1)</sup> to give weight to the number of school children and relative sparsity of population.
- (b) In 1957-58 and each year thereafter the total amount is to be distributed in proportion to the adjusted population<sup>(1)</sup> of the States.

If in any year the amount due to a State as thus calculated is less than the amount allotted to it in 1946-47, the State is to be paid the same as in 1946-47, and the balance is to be distributed amongst the remaining States as if they were all the States.

The minimum distributable amount for 1947-48 and later years was raised to £45,000,000 by the provisions made in 1947. For this purpose a supplementary grant of £5,000,000 is provided for 1947-48, and in subsequent years there is to be a supplementary grant equal to the excess (if any) of £45,000,000 over the distributable amount as determined under the 1946 plan, to be distributed amongst the States in the same proportions as was the sum of £40,000,000 in 1946-47.

The reimbursements denoted are the gross amounts receivable by the States under the uniform tax plan. The amount receivable from the Commonwealth as grant in any year is the net amount after deducting arrears of State income tax collected in the year. In the event of the uniform income tax ceasing to operate an amount equivalent to the aggregate of such deductions, less refunds of State taxes made by the Commonwealth, is to be paid to the States, with interest thereon to 30th June, 1946, at a rate not less than 3 per cent. per annum. Collections of arrears of State income taxes totalled £10,055,350 to 30th June, 1946, while the Commonwealth paid £1,263,463 in refunds of State income taxes.

#### *Commonwealth Income Tax and Social Services Contribution.*

Income tax has been levied by the Commonwealth since 1915-16.

Commonwealth taxation of incomes of individuals is levied in the form of "income tax" and "social services contribution." The social services contribution was introduced as from 1st January, 1946; proceeds of the

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<sup>(1)</sup> The adjusted population of a State in any year is calculated by adding to the population at the beginning of the year four times the number of children aged 5 to 15 years, and increasing the resultant number by a percentage equal to the percentage which the sum of—

- (a) three-quarters of the population in areas with density of less than one person per square mile,
  - (b) half the population in areas with a density of one and under two persons per square mile, and
  - (c) one-quarter of the population in areas with a density of two and under three persons per square mile,
- is of the total population.

levy are paid into the Consolidated Revenue Fund and are then transferred to the National Welfare Fund for expenditure on social services (*see the chapter "Social Condition"*).

Company income tax is levied on income derived in the year preceding the year of tax, and the tax is payable in a lump sum following the issue of an assessment notice.

Personal incomes were treated in the same way until January, 1941, when an instalment system was introduced which required employers to make deductions from salaries and wages to be applied in payment of tax due by employees on their earnings of the previous year. As from July, 1944, the taxation on incomes of individuals, including the social services contribution since January, 1946, has been on the "pay as you earn" system. The method of transition to the latter system is described at page 381 of the Year Book for 1941-42 and 1942-43.

Under the "pay as you earn" system, individuals are required to make payments on a prescribed scale during a year on account of tax on income derived in that year. In the case of employees the payments are deducted at the source from salaries and wages. Non-employees are required to pay in lump sum a provisional tax which, as a rule, is calculated on the assumption that income of the current year will be equal to that of the previous year.

The tax is assessed finally from annual returns which all taxpayers must render after the close of the income year. Differences between the sums actually paid and the final amount of tax are adjusted in assessment notices.

*Residents of Australia* are liable for tax on income derived in Australia and on dividends from sources outside Australia. Other income from ex-Australian sources is exempt if subject to tax in the country where it is derived.

*Non-Residents of Australia* are liable for tax on income derived from sources within Australia.

*Members of the Forces.*—Dependants' allowances are exempt. Other concessions, which are to cease to operate after 30th June, 1947, are: (a) exemption of pay in respect of members serving outside Australia; (b) exemption of deferred pay, and (c) a special deduction from the income, including service pay, of members serving in Australia. The deduction allowed is the full amount of the taxable income where it does not exceed £250; where the taxable income exceeds £250 the deduction is £146 and it diminishes with rising income to vanish at £587. Merchant seamen also receive this deduction but the amount may not exceed the income derived from employment on sea-going ships.

*Zone Allowances* of £20 or £40 are made as a special deduction from the income of residents of certain prescribed areas by reason of uncongenial climatic conditions, isolation and high living costs.

*Exemptions.*—The incomes exempt from income tax and social services contribution include the official salary of the Governor-General, the State Governors and official representatives of other countries; the revenue of



local authorities and of charitable, religious, scientific and similar institutions not carried on for gain; income from gold mining; war pensions and invalid, old age and widows' pensions; child endowment; Commonwealth unemployment and sickness benefits.

There is a general exemption from social services contribution where the taxable income does not exceed £104, or in the case of resident with dependants £156. The exemption from income tax applies to taxable incomes up to £200. Where, however, there are dependants the concessions allowed have the effect of raising the limit of exemption as illustrated in the following table in respect of income derived in the years 1944-45 to 1946-47.

TABLE 202.—Limits of Income not Subject to Tax.

Individuals with Dependants as under.	1944-45.	1945-46.	1946-47.	
			Social Services Contribution.	Income Tax.
	£	£	£	£
None ... ..	104	104	104	200
Wife ... ..	104	156	156	280
„ and child ... ..	175	175	175	345
„ „ two children ... ..	211	211	211	378
„ „ three children ... ..	257	257	257	412
„ „ four children ... ..	277	277	277	447

*Taxable Income* is gross income less expenses incurred in earning it.

*Rates of Tax.*—The rates of social services contribution are the same for both personal exertion income and property income, but the rates of income tax are generally higher on property than on personal exertion income. In the case of composite incomes the rate of income tax applicable to each class of income is that which would have applied if the whole income had been derived from that class.

Where income is derived from agricultural or pastoral pursuits the rates are determined by averaging the taxable income from all sources over a period of five years ending with the year of income.

*Rates of Social Services Contribution—1945-46 and 1946-47 Income.*—The contribution is levied on taxable income as determined for purpose of income tax. Concessions for dependants, medical expenses, etc., which in the case of income tax are allowable as rebates of tax, are made by adjustment of the rate of contribution where the taxable income exceeds the sum of the rebatable amounts (see page 245) by less than £180. Where the excess of taxable income is £180 or more, the concessions are allowed in the income tax assessment.

The rates of social services contribution per £ of taxable income derived in 1945-46 were *one-half* the rates imposed on 1946-47 income ascertained as below—

- (a) *Basic Rate* (payable by individuals not entitled to concessional allowances) is 3d., increasing by 3d. for every £ by which the taxable income exceeds £100 to the maximum rate of 18d. on taxable income of £220 or over.

- (b) *Concessional Rate* (payable by individuals entitled to concessional allowances) may be ascertained by the following formula in which B = basic rate, T = taxable income (£'s), and RA = sum of the rebatable amounts as used in the calculation of concessional rebates of income tax.

Taxable Income.	Rate Per £ in Pence.
£105 to £180	$B \times \frac{T-RA}{T}$ .
£181 and over	$B \times \frac{T-RA}{180}$ or basic rate, whichever is the less.

The contribution payable may not exceed half the excess of the taxable income over £104, or where there are dependants, £156. The minimum contribution is 10s.

*Rates of Income Tax.*—The amount of income tax ascertained by reference to the rates of tax shown below is reducible by rebates calculated as described on page 245. As an example of the computation of rates of tax, the rate on a taxable income of £793 derived in 1945-46 from personal exertion is 65.3386d., being the average amount of tax per £ of income taking £300 @ 31.5d., and £493 @ 85.93d., i.e.,  $493 \times [81 + (493 \times .01)]$ .

*Rates, 1945-46 Income.*—

Taxable Income.			Rates of Tax per £ of Taxable Income.		
			Personal Exertion.		
£	£	£	d.	d.	d.
105 to	200	100 at	3 balance at	15 increasing by	.0825 for each £ of balance
201	300	200	14.625	49.5	.1575
301	1,000	300	31.5	81	.01
1,001	2,000	1,000	71.05	95	.0315
2,001	3,000	2,000	98.775	158	.014
3,001	5,000	3,000	123.183	186	.004
5,001 and over	5,000		151.51	202.	

*Property.*

£	£	£	d.	d.	d.
105 to	200	100 at	3 balance at	15 increasing by	.0825 for each £ of balance.
201	300	200	14.625	61.75	.225
301	1,000	300	37.83	106.75	.01
1,001	2,000	1,000	90.975	120.75	.032375
2,001	5,000	2,000	122.05	185.5	.00275
5,001 and over	5,000		165.07	202.	

*Rates, 1946-47, Income.*—

Taxable Income.			Rates of Tax per £ of Taxable Income.		
			Personal Exertion.		
£	£	£	d.	d.	d.
201 to	300	200 at	Nil balance at	36 increasing by	.06 for each £ of balance.
301	1,000	300	14	48	.02
1,001	2,000	1,000	47.6	76	.025
2,001	3,000	2,000	74.3	126	.014
3,001	5,000	3,000	96.2	154	.005
5,001 and over	5,000		123.32	174.	

*Property.*

£	£	£	d.	d.	d.
201 to	300	200 at	Nil balance at	47 increasing by	.1 for each £ of balance.
301	1,000	300	19	67	.02
1,001	2,000	1,000	62.4	95	.029
2,001	5,000	2,000	93.2	153	.0035
5,001 and over	5,000		135.38	174.	

*Concessional Rebates of Income Tax.*—These rebates are based on *rebatable amounts* as prescribed per allowable dependants and as represented by actual payments in respect of certain items of expense incurred by the taxpayer. The amount of rebate is calculated by applying to the rebatable amounts the personal exertion rate of income tax appropriate to the taxpayer's total taxable income *plus* the maximum rate of social services contribution—i.e., 9d. for 1945-46 income and 18d. for 1946-47 income. The rebatable amounts, with the maximum rebates allowed for dependants, are indicated below—

(1) Dependants.	Rebatable Maximum amount, Rebate.	
	£	£
a. Spouse (or female relative caring for widowed taxpayer's children)	100*	45
b. Daughter keeping house for widowed taxpayer ... ..	100	45
c. Housekeeper having care of widowed taxpayer's children ... ..	100	45
d. Mother, wholly maintained by taxpayer ... ..	100	45
e. Children under age 16 years—		
one child ... ..	75	45
Each other child ... ..	30	8
f. Invalid children age 16 years or over, each ... ..	75†	45
g. Children age 16 to 18 years, at School or University (full time) each	75‡	45

\* Up to £125 where taxable income is between £200 and £300.

† Less amount of any invalid pension received.

‡ Less value of any Government assistance for education.

No rebate is allowed in respect of a spouse (or female relative), or daughter-housekeeper, whose separate income is £100 or more; full rebate is allowed if the separate income does not exceed £50 and partial rebate if the income is between £50 and £100.

(2) Actual payments in respect of the taxpayer, spouse and children (under age 21 years in respect of items *a* to *c*) for: (a) medical and hospital expenses (including dental expenses up to £10, optical expenses and, in case of blindness or total invalidity, pay of attendant) up to a maximum of £50 for each member of the family; (b) artificial limbs, eyes or hearing aids; (c) funeral expenses up to £20; and (d) life assurance, superannuation and friendly society benefits, up to £100.

(3) Actual payments in respect of (a) annual rates and land tax on non-income producing property and (b) gifts of £1 or more for certain philanthropic or educational objects or defence purposes (not exceeding taxable income).

The concessional rebates under (1) and (2) above are allowed to residents only; those under (3) are allowed to residents and non-residents.

*Other Rebates* are the excess of tax at current rates over tax at 1930-31 rates on interest from Commonwealth loans issued prior to 1st January, 1940; 2s. in the £ on interest from Commonwealth loans of later issue and State and semi-Governmental loans issued free of State income tax; one-third of tax at personal exertion rate on calls paid to gold-mining, afforestation and oil prospecting companies.

*Amount of Tax Payable.*—Examples of the amount of tax payable on incomes of individuals are shown in the following table. The tax on incomes derived in 1944-45 was levied as income tax at the highest war-time rates which were in force from the income year 1942-43. The rates

of tax were reduced on 1945-46 incomes, and again on 1946-47 incomes, and the amounts shown are the totals of the separate levies in these years for social services contribution and income tax.

TABLE 203.—Tax on Income of Individuals.

Taxable Income.	On Property Income.	On Personal Exertion Income.			
	Without Dependants.	Without Dependants.	With Dependants.		
			Wife.	Wife and Child.	Wife and Two Children.

## Income Tax on Income Derived in 1944-45.

£	£ s.	£ s.	£ s.	£ s.	£ s.
105	0 10	0 10	0 10	.....	.....
150	10 9	10 9	3 9	.....	.....
200	21 17	21 17	10 18	2 14	.....
250	40 2	36 14	18 7	7 7	2 18
300	63 7	55 0	36 13	22 18	17 8
350	89 3	75 2	53 13	37 11	31 2
400	115 4	95 8	71 11	53 13	46 10
500	167 18	136 13	109 6	88 16	80 16
600	221 9	178 15	148 19	126 12	118 12
800	331 1	265 8	232 4	207 7	199 7
1,000	443 19	355 8	319 17	293 4	285 4
1,250	596 1	478 12	440 6	411 12	403 12
1,500	765 17	618 19	577 14	546 15	538 15
2,000	1,158 11	951 5	906 5	870 12	862 12
3,000	2,026 5	1,747 2	1,702 2	1,658 9	1,650 9
4,000	2,916 17	2,622 2	2,577 2	2,532 2	2,524 2
5,000	3,830 8	3,530 8	3,485 8	3,440 8	3,432 8
10,000	8,455 8	8,155 8	8,110 8	8,065 8	8,057 8
20,000	17,705 8	17,405 8	17,360 8	17,315 8	17,307 8

## Tax (Income and Social Services) on Income Derived in 1945-46.

£	£ s.	£ s.	£ s.	£ s.	£ s.
105	0 10	0 10	.....	.....	.....
150	8 3	8 3	.....	.....	.....
200	17 8	17 8	9 1	2 6	.....
250	36 15	33 10	15 14	6 5	2 10
300	58 11	50 12	33 15	19 5	14 13
350	82 15	69 9	49 12	34 7	26 4
400	107 4	88 11	66 8	49 16	43 3
500	156 13	127 6	101 17	82 15	75 2
600	207 0	166 17	139 1	118 4	110 4
800	310 2	248 11	217 10	194 4	186 4
1,000	416 11	333 11	300 4	275 4	267 4
1,250	560 3	450 1	414 1	387 1	379 1
1,500	720 12	583 0	544 3	515 0	507 0
2,000	1,092 2	898 2	853 4	819 10	811 10
3,000	1,913 19	1,652 6	1,607 6	1,566 0	1,558 0
4,000	2,758 15	2,481 9	2,436 9	2,391 9	2,383 9
5,000	3,626 9	3,343 19	3,298 19	3,253 19	3,245 19
10,000	8,022 6	7,739 16	7,694 16	7,649 16	7,641 16
20,000	16,813 19	16,531 9	16,486 9	16,441 9	16,433 9

TABLE 203.—Tax on Income of Individuals—*continued*.

Taxable Income.	On Property Income.	On Personal Exertion Income.			
	Without Dependants.	Without Dependants.	With Dependants.		
			Wife.	Wife and Child.	Wife and Two Children.

Tax (Income and Social Services) on Income Derived in 1946-47.					
£	£ s.	£ s.	£ s.	£ s.	£ s.
105	0 10	0 10	.....	.....	.....
150	5 16	5 16	.....	.....	.....
200	12 18	12 18	7 3	1 16	.....
250	29 12	26 17	13 0	5 4	2 2
300	46 5	40 0	26 13	15 12	11 17
350	64 3	53 19	38 11	26 4	21 3
400	82 10	68 7	51 5	38 9	33 7
500	120 8	98 7	78 14	63 19	58 1
600	160 0	130 0	108 7	92 2	85 12
800	244 3	198 7	173 11	154 19	147 11
1,000	335 0	273 7	246 0	225 10	217 10
1,250	460 5	377 15	347 11	324 17	316 17
1,500	600 12	495 4	462 4	437 9	429 9
2,000	926 13	769 3	730 14	701 17	693 17
3,000	1,653 15	1,427 10	1,382 10	1,346 16	1,338 16
4,000	2,410 0	2,165 0	2,120 0	2,079 8	2,071 8
5,000	3,195 8	2,944 3	2,899 3	2,855 0	2,847 0
10,000	7,195 8	6,944 3	6,899 3	6,854 3	6,846 3
20,000	15,195 8	14,944 3	14,899 3	14,854 3	14,846 3

In the examples no allowance has been made for rebates other than the concessional rebates for the dependants indicated. The concessions for dependants are the same whether the income is derived from personal exertion or property; therefore, the tax payable on property income where there is dependent wife or wife and one or two children may be ascertained by the allowance of concessions equal to the amounts allowed under personal exertion income.

*Assessments of Resident Individuals.*—Analysis of the assessments of Commonwealth tax on incomes derived in 1943-44 by individuals resident in New South Wales and Australia is shown below. The particulars are classified according to the actual income of taxpayers, which includes certain deductions of a concessional nature and exempt income.

TABLE 204—Commonwealth Tax Assessments on Incomes Derived in 1943-44 by Resident Individuals.

Grade of Actual Income.	Residents of New South Wales.			Residents of Australia.		
	Number of Taxpayers.	Total Income.	Tax Assessed.*	Number of Taxpayers.	Total Income.	Tax Assessed.*
£		£000	£000		£000	£000
150 and under ...	84,996	10,918	508	223,462	28,646	1,314
151 to 200 ...	100,528	17,563	1,420	252,091	44,030	3,493
201 „ 250 ...	73,645	16,520	1,721	197,041	44,280	4,542
	259,169	45,001	3,649	672,594	116,956	9,349
251 „ 300 ...	83,407	23,113	2,589	231,564	64,103	7,020
301 „ 350 ...	107,248	34,944	4,459	277,991	90,528	11,378
351 „ 400 ...	103,160	38,677	5,528	254,095	95,236	13,518
401 „ 500 ...	124,948	55,404	9,260	299,858	133,035	22,127
	677,932	197,139	25,485	1,736,102	499,858	63,392
501 „ 600 ...	49,733	27,041	5,411	120,818	65,732	13,021
601 „ 800 ...	35,068	23,849	5,623	90,420	61,624	14,354
801 „ 1,000 ...	13,102	11,637	3,220	35,161	31,241	8,547
	775,835	259,666	39,739	1,982,501	658,455	99,314
1,001 to 1,250 ...	8,126	9,057	2,809	22,307	24,830	7,631
1,251 „ 1,500 ...	4,601	6,282	2,180	12,839	17,531	6,024
1,501 „ 2,000 ...	4,951	8,491	3,327	13,609	23,355	9,080
	793,513	283,496	48,055	2,031,256	724,171	122,049
2,001 „ 3,000 ...	3,786	9,099	4,329	10,491	25,251	11,885
3,001 „ 4,000 ...	1,306	4,488	2,612	3,731	12,792	7,092
4,001 „ 5,000 ...	531	2,351	1,464	1,616	7,165	4,381
	799,136	299,434	56,360	2,047,094	769,379	145,407
5,001 to 10,000 ...	747	4,877	3,372	2,051	13,519	9,179
10,001 „ 15,000 ...	102	1,204	884	332	3,986	2,980
15,001 and over ...	79	1,997	1,555	217	5,756	4,169
Total ...	800,064	307,512	62,171	2,049,694	792,640	161,735

\* Normal assessment, subject to pay-as-you-earn transitional rebate—approximately 75%.

#### *Commonwealth Taxation of Companies.*

*Company Income Tax* is levied on the net income of a company derived in the year preceding the year of tax. A co-operative company is allowed a deduction of the amount distributed among its shareholders as rebates or bonuses based on business done by shareholders with the company, also the amount of interest or dividends on shares distributed to shareholders. Otherwise dividends paid by companies to shareholders are not allowed as a deduction and are assessable in the hands of the shareholder, but a resident company receives a rebate of the tax on dividends included in taxable income. Prior to the income year 1939-40, other shareholders were entitled to rebates of tax on dividends as described in earlier issues of the Year Book. Social services contribution is not payable by companies, except in respect of the special tax on undistributed income of private companies (see below).

*Ordinary Company Tax* at the rate of 6s. in the £ is payable on taxable income derived in the years 1941-42 to 1946-47. The rate payable by mutual life assurance companies and on profit of non-mutual companies distributed to policy holders is 5s. in the £.

*Undistributed Profits Tax* is payable by companies on taxable income less dividends paid out of that taxable income, income taxes (including wartime company tax and supertax in the case of a public company), any tax paid outside Australia on that income, and the net loss incurred in ex-Australian business. *Public Companies* are assessed at the rate of 2s. in the £ on undistributed income of the years 1939-40 to 1946-47. *Private Companies* are required to pay the additional amounts of income tax and social services contribution which would have been payable by shareholders had the taxable income been distributed in full.

*Companies Super Tax* at the rate of 1s. in the £ is payable on the taxable income in excess of £5,000 derived in the years 1939-40 to 1946-47 by companies except the following, viz., private companies; co-operative companies; life assurance companies the profits of which are divisible only among policy holders or which have a deficiency of assets; companies (other than cash order and similar companies) in which little or no capital is required, to the extent to which profit arises from commission, fees or charges for services rendered.

*War-time Company Tax* was imposed on taxable profits derived in 1939-40 and subsequent years until repealed in respect of profits derived after 1945-46. It is based on the principle of taxing profits according to their relationship to the capital employed in earning them. Taxable profit consists of taxable income as assessed for Federal income tax, less income-tax payable thereon other than super tax and tax on undistributed income.

Companies which are exempt from the super tax, as described above, and companies, not being subsidiary companies, with taxable profits not exceeding £1,000, are exempt from the war-time company tax. If the amount assessed is less than the super tax payable by a company it is not required to pay war-time company tax; and if the war-time company tax is greater the amount of super tax is deducted therefrom.

Profits up to "the statutory percentage," which, in respect of the income-years 1940-41 to 1945-46, is 5 per cent. of capital employed, are not subject to war-time company tax, and profits in excess of 5 per cent. are taxable according to the scale shown in the following table. For instance, if the profits of a company represent  $11\frac{1}{2}$  per cent. of capital employed, the war-time tax is 21 per cent. of profits which represent 6 per cent. of capital employed, plus 42 per cent. of profits which represent  $\frac{1}{2}$  per cent. of capital employed.

TABLE 205.—Commonwealth War-time Company Tax—Rates of Tax  
(Income years, 1940-41 to 1945-46).

Taxable Profit expressed as percentage of capital employed.		(3) Rates of Tax on "Excess" taxable profits, as specified in column (2).	
(1)  Total.	(2) "Excess" (over 5 per cent. of capital employed) subject to War-time Company Tax.		
per cent.	per cent.		
Over 5 to 6	1 or less	6% on "excess."	
" 6 ,, 7	Over 1 to 2	6% on first 1% "excess" and 12% on balance of "excess."	
" 7 ,, 8	" 2 ,, 3	9	2 " 18 " "
" 8 ,, 9	" 3 ,, 4	12	3 " 24 " "
" 9 ,, 10	" 4 ,, 5	15	4 " 30 " "
" 10 ,, 11	" 5 ,, 6	18	5 " 36 " "
" 11 ,, 12	" 6 ,, 7	21	6 " 42 " "
" 12 ,, 13	" 7 ,, 8	24	7 " 48 " "
" 13 ,, 14	" 8 ,, 9	27	8 " 54 " "
" 14 ,, 15	" 9 ,, 10	30	9 " 60 " "
" 15 ,, 16	" 10 ,, 11	33	10 " 66 " "
" 16 ,, 17	" 11 ,, 12	36	11 " 72 " "
" 17	" 12	39	12 " 78 " "

The statutory percentage may be increased in particular cases on the decision of the Board of Referees constituted to investigate such matters.

The rate of tax payable by a company engaged in primary production is determined in relation to taxable profits averaged over a period not exceeding five years.

#### *Collections of Commonwealth Tax on Incomes.*

The amount of Commonwealth tax on incomes collected in each of the last three years, inclusive of tax instalments deducted from wages of employees, is shown below—

Commonwealth Tax on Income—				1943-44	1944-45	1945-46
				£	£	£
Individuals	...	...	...	132,464,710	155,682,242	159,329,362*
Companies	...	...	...	48,391,735	56,186,568	55,264,216
War-time Company Tax	...	...	...	2,942,724	3,665,227	
Total Collections	...	...	...	183,799,169	215,534,037	214,593,578

\* Includes Social Services Contribution.

In addition, the Commonwealth collected on behalf of the States arrears of State income taxes totalling £1,441,858 in 1943-44, £822,684 in 1944-45 and £733,550 in 1945-46.

Under the uniform tax plan the Commonwealth paid to the States as reimbursement grants £32,047,342 in 1943-44, £32,666,316 in 1944-45 and £32,755,450 in 1945-46 (representing £33,489,000, less arrears of State tax



collected), also as additional grants to some of the States £553,172 for the year 1944-45 and £2,132,920 for 1945-46. Payment of the latter sums was made in 1945-46 and 1946-47, respectively.

*Commonwealth Entertainments Tax.*

Commonwealth Entertainments Tax was levied for the first time in January, 1917, and discontinued in October, 1933. The Commonwealth reimposed the tax (at higher rates) as from 1st October, 1942, when the States—except Queensland, where the tax was not levied—suspended taxation of this nature in accordance with the uniform tax plan described on page 239.

Exemptions from the Commonwealth tax include, generally, admissions to entertainments conducted for purely public, patriotic, philanthropic, religious or charitable purposes, also to entertainments which are wholly educational in character or partly educational and partly scientific and conducted by a body not carried on for profit.

The tax is payable on admissions for which the charge is 1s. or more. On an admission charge of 1s. the tax is 3d. and the rate increases by 2d. for each additional 6d. or part thereof until the admission charge reaches 5s., then it increases by 3d. for each additional 6d. or part thereof. For entertainments where all the performers are actually present and performing (e.g., stage play) the rates of tax are approximately 25 per cent. below the general rates.

A special scale of rates is payable where a separate charge of 3d. or more is made for refreshments at dances, etc., or for the use of facilities for participation in entertainments at amusement parks.

The amount of Commonwealth Entertainments Tax collected in Australia was £4,704,242 in 1943-44, £5,026,821 in 1944-45 and £5,069,672 in 1945-46 including collections in New South Wales of approximately £1,943,000, £2,157,000 and £2,210,000 in the respective years.

Further particulars are shown in the chapter "Social Condition."

*Commonwealth Land Tax.*

The land tax imposed in 1910 was the first direct taxation by the Commonwealth. It is a graduated tax on the unimproved value of the lands in Australia.

Land to the value of £5,000 owned by a resident of Australia is exempt from the tax. The ordinary rate of tax payable by residents is  $1\frac{1}{8}\frac{1}{3}\frac{1}{6}$  d. for the first £ of value in excess of £5,000, then it increases uniformly by  $1\frac{1}{8}\frac{1}{3}\frac{1}{6}$  d. for every increase of £1 to 5d. in the £ on a taxable value of £75,000, and the tax is 9d. for every £ in excess of that amount.

The ordinary rate payable by absentee owners is 1d. in the £ on the value up to £5,000 and the rate on higher values is 1d. more than the corresponding rate payable by a resident.

Super tax is levied on assessments made after 1st July, 1941, where the taxable value exceeds £20,000. The rate is 20 per cent. of the tax at ordinary rate or 1 per cent. of the amount by which taxable value exceeds £20,000, whichever is the less.

Lands owned by a State, municipality, or other public authority, or a State savings bank and those used for religious, charitable or educational purposes are exempt from the tax. There is also exemption of lands owned by life insurance societies and trade unions, and grounds owned by

clubs, etc., and used for sports (except golf and horse racing), but the exemption is only partial if the lands are not used solely for the purposes of such bodies. In the case of non-mutual life assurance societies, the amount of exemption is reduced in the proportion which the value of policies in Australia bears to the total value of policies.

The compilation of statistics regarding land tax assessments, as given below in respect of taxable lands held in New South Wales from 1937 to 1941, was discontinued during the war.

TABLE 206.—Federal Land Tax, Value of Taxable Lands in New South Wales, 1937 to 1941.

Year.	Taxable Lands at 30th June.				Tax Assessed.		Area of Country. Lands Assessed.
	Improved Value.		Unimproved Value.		Town Lands.	Country Lands.	
	Town.	Country.	Town.	Country.			
	£000.	£000.	£000.	£000.	£	£	acres 000
1937	144,572	117,429	63,920	53,948	436,692	208,651	32,785
1938	149,889	119,377	64,832	53,502	497,221	227,912	32,105
1939	163,213	119,455	71,964	54,269	567,391	231,523	32,035
1940	163,751	123,589	72,365	56,933	1,142,123	471,573	34,335
1941	173,918	124,277	71,977	57,123	1,368,264	545,829	35,133

Ordinary rates of tax were increased by 11.1 per cent. in 1938-39 and 100 per cent. in 1940-41, and a super tax was imposed in 1941-42.

Receipts from Federal land tax in Australia amounted to £3,819,199 in 1943-44, £3,664,420 in 1944-45, and £3,782,359 in 1945-46.

In terms of National Security Regulations land values for purposes of assessments of land tax after 13th March, 1942, have been "pegged" at the values assessed for the financial year 1939-40.

#### *Commonwealth Estate Duties.*

The Estates Duty Assessment Act, which came into operation on 21st December, 1914, provided for the imposition of a Federal duty on properties of persons who died after the commencement of the Act.

Where the whole of the estate passes to the widow, children or grandchildren there is a statutory exemption of £2,000 from the value of the estate for duty and it diminishes by £1 for every £10 of value between £2,000 and £10,000, and by £1 for every £2 of value in excess of £10,000. Where no part of the estate passes to the widow, children or grandchildren, the exemption is £1,000, diminishing by £1 for every £10 of value between £1,000 and £6,000 and by £1 for every £8 of value in excess of £6,000. Proportionate deductions are allowed when only part of an estate passes to the widow, children and grandchildren.

Estates of members of the Naval, Military and Air Forces who die during the war or within three years thereafter, as a result of injury received or disease contracted on active service, are exempt, to the extent of £5,000, in respect of such part of the estate as passes to certain next of kin.

The rates of duty, ranging from 1 per cent. to 15 per cent. of the dutiable value of the estate, remained unchanged from the date of commencement in 1914 to 20th May, 1940; then a new scale, ranging from 3 per cent.

to 20 per cent., was introduced. The rates on estates exceeding £20,000 in value were increased in the following year and the rates on estates of persons who die on or after 3rd December, 1941, are as follows:—

Value for duty of the Estate.	Rates of Duty (per cent. of value for duty).
Not exceeding £10,000 ... ..	3 per cent.
£10,001 to £20,000 ... ..	3 per cent. increasing by $\frac{3}{100}$ per cent. for every £100 of value in excess of £10,000.
£20,001 to £120,000 ... ..	6 per cent. increasing by $\frac{2}{100}$ per cent. for every £100 of value in excess of £20,000.
£120,001 to £499,999 ... ..	26 per cent. increasing by $\frac{1}{200}$ per cent. for every £1,000 of value in excess of £120,000.
£500,000 or more ... ..	27·9 per cent.

The amount of Federal estate duty collected in the Commonwealth was £2,761,562 in 1943-44, £3,090,200 in 1944-45 and £3,880,041 in 1945-46.

#### *Gift Duty.*

A gift duty has been imposed by the Commonwealth on dispositions of property, real or personal, made after 28th October, 1941, without adequate consideration in money or money's worth. Gifts by residents are subject to duty if the property concerned is situated in or out of Australia, and gifts by non-residents if the property is in Australia.

A gift is taxable if the aggregate value of all gifts by the same donor at the same time, or during the period of 18 months previously or 18 months subsequently, exceeds £500 (£2,000 from 3rd June, 1947). The rates of tax, based on the aggregate value of the donor's gift within the period of three years, are the same as the rates of estate duty shown above.

Duty is not payable in respect of gifts by employers in the form of contributions to funds for employees' pensions, etc., or retiring allowances, gratuities or bonuses, or payments to augment employees' pay as members of defence forces; gifts to institutions or organisations not carried on for profit; gifts to Commonwealth or a State; business gifts for the purpose of obtaining commercial benefit or writing off irrecoverable debts; premiums up to £100 per annum for life assurance for the benefit of wife or children; small gifts to the same donee which do not exceed in the aggregate £50 during the period of three years; and gifts for the maintenance, education or apprenticeship of any person, having regard to the legal and moral obligations of the donor to afford such assistance.

Commonwealth receipts from gift duty were £221,878 in 1943-44, £329,296 in 1944-45 and £392,949 in 1945-46.

#### *Pay-roll Tax.*

A tax on pay-rolls was introduced by the Commonwealth in July, 1941, as a means of obtaining additional revenue for child endowment. Since July, 1945, the tax has formed part of the finances of the National Welfare Fund, as described in the chapter "Social Condition."

The tax is payable by employers, including the State Government and statutory bodies; municipal and local government bodies; also by Commonwealth public authorities, where wages are not paid out of the Commonwealth Consolidated Revenue Fund. Employers whose pay-roll does not

exceed £1,040 in 1940-41 or any subsequent year, religious or public benevolent institutions and public hospitals are exempt; and the tax is not levied on wages paid by the Governor-General or State Governors or wages paid to official staffs of British or Dominion trade commissioners or of diplomatic or consular representatives of any country.

The tax is levied on wages, salaries, commission, bonuses and allowances paid or payable in respect of any period after 30th June, 1941, less a deduction of £1,040 per annum. As a general rule the tax is collected monthly on pay-rolls which exceed £20 a week, and adjustment is made annually where necessary. The rate of tax is  $2\frac{1}{2}$  per cent.

Receipts from pay-roll tax in Australia amounted to £10,902,585 in 1943-44, £11,088,088 in 1944-45 and £11,499,243 in 1945-46.

#### *Customs, Excise and Primage Duties.*

The power to impose customs and excise duties in Australia is vested exclusively in the Commonwealth. Particulars regarding the customs and excise tariffs and the ad valorem primage duty, are published in the chapter "Oversea Trade" of this Year Book.

#### *Sales Tax.*

A sales tax on locally manufactured and imported goods has been imposed by the Commonwealth since 1st August, 1930. The tax is payable by manufacturers and wholesale merchants on sales of taxable goods to retailers or consumers, and by importers on taxable goods imported by retailers, consumers and users. The tax is not charged on sales by manufacturers or wholesale merchants to other manufacturers or merchants (unless the goods are for use by the purchaser).

Certain goods are exempt from the tax and the list of exemptions has been varied from time to time. The general exemptions include primary products produced in Australia, goods sold for export and goods sold to a Government or statutory authority.

Since November, 1940, taxable goods have been classified into groups, each with a different rate of sales tax.

The rate of tax was  $2\frac{1}{2}$  per cent. of sale value, as from 1st August, 1930. Subsequent changes were as follows:

Date.	per cent.	Date.	per cent.
1930—1st August ... ..	$2\frac{1}{2}$	1940—3rd May ... ..	$8\frac{1}{2}$
1931—11th July ... ..	6	1940—22nd November ... ..	5, 10 or 15
1933—26th October ... ..	5	1941—30th October ... ..	5, 10 or 20
1936—11th September ... ..	4	1942—1st May ... ..	$12\frac{1}{2}$ or 25
1938—22nd September ... ..	5	1943—21st July ... ..	$7\frac{1}{2}$ , $12\frac{1}{2}$ or 25
1939—9th September ... ..	6	1946—15th November ... ..	10 or 25

As from 21st July, 1943, the rate payable on clothing and softgoods rationed by coupons was reduced from  $12\frac{1}{2}$  per cent. to  $7\frac{1}{2}$  per cent. as part of a plan for stabilisation of prices. These goods were exempt from tax as from 15th November, 1946.

The amount of sales tax collected in Australia was £27,908,691 in 1943-44, £29,671,802 in 1944-45 and £33,600,175 in 1945-46.

*Gold Tax.*

Gold produced in Australia or in any Australian Territory and delivered on or after 15th September, 1939, to the Commonwealth Bank is subject to taxation by the Commonwealth. Wrought gold and gold coin are exempt from the tax and rebates of tax are allowed to prospectors in respect of the first 25 ounces of gold in any year and to other producers where the profit from working, after payment of tax, does not exceed 30s. per ounce fine. The tax is collected by the Commonwealth Bank which deducts the amount from the purchase price payable to producers or other persons. The rate of tax varies according to the price of gold and is one-half of the amount by which the price exceeds £9 per ounce fine. Collections are paid into the Consolidated Revenue Fund and from this fund the amount derived from gold produced in the Mandated Territory of New Guinea, is paid into a trust account to be expended for the defence and other purposes of the territory. The tax was suspended in respect of gold delivered after 19th September, 1947.

The amount of gold tax paid into the Consolidated Revenue Fund of the Commonwealth was £317,720 in 1943-44, £342,457 in 1944-45, and £383,552 in 1945-46.

*Flour Tax and Wool Tax and Contributory Charge.*

Particulars of the tax on flour are given in the chapter "Agriculture" and of the tax and contributory charge on wool in the chapter "Pastoral Industry" of this Year Book. Proceeds of these charges are used for the special purposes of the wheat and wool-growing industries and are, therefore, to be distinguished from taxation as applied to general revenue purposes.

## STATE FINANCE.

The divisions of the public accounts of the State of New South Wales at 30th June, 1946, are listed in Table 220. The following are the chief operating accounts.

The *Consolidated Revenue Fund* was created by the Constitution Act. All taxes and territorial and other revenues of the Crown are paid to this fund, unless it is prescribed by statute that they are to be paid into some other fund. Subject to certain charges fixed by the Constitution Act, the fund may be appropriated by Parliament for expenditure on specific purposes, as prescribed by statute. Parliamentary appropriations may be either special or annual. A special appropriation is one which is contained in an Act which itself gives authority for the expenditure incurred on the object or function to which it relates. Annual appropriations are made each year to meet expenses of government not covered by special appropriations and not provided for by payments from special funds. Annual appropriations or balances of consolidated revenue are not available for expenditure after the end of the year for which they were voted.

The funds of the *Railways, Transport Trusts and Sydney Harbour Trust* relating to the State-owned transport services are described in the chapter "Trade, Transport and Communication" of this Year Book.

Particulars of the *Closer Settlement Fund* for the promotion of land settlement are shown on page 266.

The *Road Transport and Traffic Fund* and the *State Transport (Coordination) Fund* dealing with the administration and control of road traffic and the regulation of commercial motor vehicles are described in the chapter "Motor and Other Licensed Vehicles."

The *Special Deposits Account* is an account in the Treasury books for recording transactions relating to sums held by or deposited with the Treasurer, which the Treasurer directs to be carried to the Special Deposits Account. The funds in this account are not subject to annual appropriations by Parliament, and balances may be expended at any time subject to certain regulations and the issue of warrants.

The *General Loan Account* receives moneys borrowed by the Government on the issue of stock, Treasury bills, and debentures under the authority of a Loan Act. Expenditure on works, services and redemptions is debited to the account in the year in which it is voted by Parliament. There is also a Loans Expenditure Suspense Account, to which are debited amounts expended on works and services which it is proposed to debit to General Loan Account, and which are voted by Parliament and debited to General Loan Account in the year after they are expended.

All expenditure from loan moneys must be authorised under an Appropriation Act, in the same manner as the ordinary expenditure chargeable to the general revenue. At the close of a financial year unapplied appropriations and balances of appropriations made by a Loan Act passed two years or longer lapse, except for the payment of claims in respect of any outstanding contract or work in progress.

#### *Revenue Accounts of New South Wales.*

A summary of the combined revenue operations of the Governmental section of the State accounts, the chief business undertakings of the State and the road vehicles registry and traffic control branch is shown in Table 207. Though not embracing all State activities, the table covers the field usually embraced within the State Revenue Budget. The special roads funds are considered separately on page 263.

The Governmental section relates to the administrative functions of Government, including the provision of social services for which there were special funds in some of the years under review.

The funds within the Governmental section, together with the Road Transport and Traffic Fund, are on a "cash" or "receipts and payments" basis, but the revenue and working expenses of the business undertakings are on an "income and expenditure" basis. The public debt charges relate only to activities included in the table; the total debt charges paid in respect of all State activities are shown in Tables 235 and 238.

TABLE 207.—State Revenue and Expenditure, 1937 to 1946.

Year ended 30th June.		Revenue.						
		Govern- mental.	Business Undertakings.				Road Transport and Traffic Fund.	Total State Revenue.
			Railways.	Tramways and Omnibuses.	Sydney Harbour.	Hunter District Water and Sewerage.		
		£000.	£000.	£000.	£000.	£000.	£000.	£000.
1937	...	25,471	17,816	3,928	1,094	321	529	49,159
1938	...	27,633	19,486	4,295	1,186	369	577	53,546
1939	...	26,422	19,147	4,374	1,156	†	611	51,710
1940	...	28,523	19,955	4,468	1,203	...	606	54,755
1941	...	30,147	23,216	4,790	1,151	...	592	59,896
1942	...	31,038	27,686	5,429	1,193	...	519	65,865
1943	...	30,178	34,072	5,582	1,192	...	510	71,534
1944	...	30,425	34,501	5,700	1,315	...	529	72,470
1945	...	34,853	31,577	5,790	1,446	...	547	74,213
1946	...	32,569	31,313	5,936	1,420	...	620	71,858

		Expenditure.							
		Govern- mental (Ordinary Depart- mental). *	Business Undertakings (Working Expenses).*				Road Transport and Traffic Fund.	Public Debt Charges. †	Total State Expen- diture.
			Railways.	Tramways and Omnibuses	Sydney Harbour.	Hunter District Water and Sewerage.			
		£000.	£000.	£000.	£000.	£000.	£000.	£000.	
1937	...	18,219	12,406	3,411	298	108	529	14,217	
1938	...	20,429	13,655	3,853	349	123	577	14,542	
1939	...	20,430	14,321	3,962	380	†	611	14,465	
1940	...	22,571	14,359	4,057	359	...	606	15,115	
1941	...	23,319	16,770	4,378	375	...	592	15,317	
1942	...	22,290	21,218	5,026	393	...	519	15,534	
1943	...	21,822	27,023	5,176	405	...	510	15,456	
1944	...	21,954	27,391	5,341	451	...	529	15,621	
1945	...	22,522	24,570	5,519	474	...	547	19,613	
1946	...	24,086	24,708	5,983	641	...	620	15,450	

\* Excluding interest, exchange and sinking fund charges. † Interest, exchange and sinking fund.

‡ Removed from State Accounts, 1st July, 1938.

Since the preceding edition the particulars of expenditure have been revised in minor respects to agree with the current form of the State accounts. To avoid duplication the governmental expenditures and railway revenues as shown omit a contribution of £800,000 annually from Consolidated Revenue Fund towards losses on developmental railways.

The figures in 1944-45 were swollen by exceptional items related to the permanent redemption of deficiency Treasury Bills amounting to £3,840,000. This expenditure was included under "Public Debt Charges" together with the normal payments totalling £15,772,690. Offsetting items included in governmental revenue were contributions towards the redemption from accumulated surplus and reserve accounts of the railways, £2,500,000, and Sydney Harbour Trust, £750,000, and there was a receipt from the Commonwealth, £638,772, for Garden Island.

Features of the State finances under war-time conditions were the high level of railway earnings and buoyancy of other revenue, coupled with a sharp reduction in commitments for unemployment relief. As a result, revenue surpluses were realised annually from 1941-42 to 1945-46, notwithstanding that large sums were transferred to reserves to provide for deferred maintenance and other purposes. By 1945-46, however, benefits accruing from the higher revenues were substantially cancelled by increases in the costs of operating Government services.

Chief among the reserve provisions were amounts included in railway working expenses for deferred maintenance, renewals, etc., as detailed in the chapter "Railways," and repayments of a Treasury advance for reconditioning tracks, of which the normal yearly instalment was £165,000. The amounts were as follows:—

	1940-41	1941-42	1942-43	1943-44	1944-45
For deferred maintenance, etc. ... ..	£ 720,000	£ 2,276,000	£ 4,884,000	£ 3,020,000	£ 670,000
For repayment of Treasury advance ... ..	495,000	495,000	330,000	495,000	330,000

Included in provisions under the head of Governmental expenditure were sums totalling £900,000 for the construction and reconstruction of Government offices (£200,000 in 1942-43, £300,000 in each 1943-44 and 1944-45 and £100,000 in 1945-46). The Governmental account also bore debits in respect of the transfer of funds to clear long standing deficiencies in other Treasury accounts which had been charged with certain expenditures in earlier years, viz., £250,000 in 1940-41 and, yearly from 1942-43 to 1945-46, £409,675, £325,000, £312,454 and £265,000, successively.

The annual surpluses and deficiencies of the several accounts forming the above aggregate statement, after the allocation of debt charges, were as follows:—

TABLE 208.—State Revenue Accounts, Surplus or Deficit, 1937 to 1946.

Year ended 30th June.	Governmental *	Railways. *	Tramways and Omnibuses.	Sydney Harbour.	Hunter District Water and Sewerage.	Total.
	£	£	£	£	£	£
1937 ... —	446,453	+ 28,397	+ 106,516	+ 255,427	+ 27,132	— 28,981
1938 ... —	408,875	+ 51,469	+ 28,101	+ 299,496	+ 48,014	+ 18,205
1939 ... —	1,541,243	+ 1,171,522	+ 14,505	+ 238,726	†	+ 2,459,534
1940 ... —	2,181,206	+ 443,833	+ 11,505	+ 301,198	.....	+ 2,312,336
1941 ... —	1,353,718	+ 235,951	+ 14,566	+ 248,023	.....	+ 855,178
1942 ... +	402,897	+ 203,899	+ 26,841	+ 252,083	.....	+ 885,720
1943 ... +	88,418	+ 774,542	+ 33,948	+ 244,962	.....	+ 1,141,870
1944 ... +	104,670	+ 754,054	+ 8,124	+ 316,500	.....	+ 1,183,348
1945 ... +	103,131	+ 544,903	+ 95,027	+ 415,020	.....	+ 968,027
1946 ... +	371,481	+ 149,588	+ 379,106	+ 228,527	.....	+ 370,490

\* Balances after transfer of £800,000 annually from Governmental Account towards losses on developmental railways.

† Removed from State Accounts, 1st July, 1938.

The above balances have been struck after charging to the several accounts annual liability for contributions to the National Debt Sinking Fund. Such charges amounted to £2,684,424 in 1944-45 and £2,709,560 in 1945-46, and for the ten years ended 1945-46 aggregated £20,064,562.



*Governmental Receipts.*

The following table provides a summary of the main items of Governmental receipts during the last five years, together with the amounts per head of population.

TABLE 209.—Governmental Receipts, 1942 to 1946.

Classification.	Year ended 30th June.				
	1942.	1943.	1944.	1945.	1946.
	Amount.				
	£	£	£	£	£
Receipts from Commonwealth for—					
Interest on Public Debt ... ..	2,917,411	2,917,411	2,917,411	2,917,411	2,917,411
Reimbursement Grants, (Uniform Taxes) ... ..	.....	11,266,758	14,719,083	14,990,820	15,045,039
Taxes ... ..	22,294,087	9,510,979	5,966,592	6,082,166	7,145,864
Land Revenue ... ..	1,673,764	1,755,010	1,690,629	1,654,243	1,648,704
Receipts for Services Rendered ... ..	1,539,384	1,426,830	1,581,655	1,708,052	1,822,235
General Miscellaneous ... ..	2,613,217	3,300,813	3,549,382	7,500,911*	3,989,442
Total ... ..	31,037,863	30,177,801	30,424,752	34,853,603*	32,568,695
	Per Head of Population.				
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Receipts from Commonwealth for—					
Interest on Public Debt ... ..	1 0 10	1 0 7	1 0 5	1 0 3	1 0 0
Reimbursement Grants, (Uniform Taxes) ... ..	.....	3 19 7	5 3 1	5 3 11	5 3 4
Taxes ... ..	7 19 1	3 7 2	2 1 10	2 2 2	2 9 1
Land Revenue ... ..	0 11 11	0 12 5	0 11 10	0 11 5	0 11 4
Receipts for Services Rendered ... ..	0 11 0	0 10 1	0 11 1	0 11 10	0 12 6
General Miscellaneous ... ..	0 18 8	1 3 4	1 4 11	2 12 0*	1 7 5
Total ... ..	11 1 6	10 13 2	10 13 2	12 1 7*	11 3 8

\* Includes exceptional items, £3,888,772 (£1 7s. per head) see page 257.

In 1941-42 State taxes represented 71.8 per cent. of the receipts. In 1945-46 the fixed sum received in terms of the uniform tax schemes, consisting of reimbursement grants, £15,045,039, and collections of arrears of State Income Tax, £471,791, represented 47.6 per cent. of total receipts, and other taxes amounted to £6,674,073 or 20.5 per cent. Details of these taxes are shown in Table 197, together with motor taxes, fees, etc., which are paid into special funds.

The Commonwealth grant, £2,917,411, towards interest on the public debt is made annually in terms of the Financial Agreement, referred to on page 285. Other receipts from the Commonwealth are included under the headings "Services Rendered" and "General Miscellaneous." Certain Commonwealth grants are paid into special funds, the principal being grants for roads and contributions to sinking fund for repayment of the State debt. The system of Federal aid for roads is described in the chapter "Roads and Bridges" of this Year Book.

*Land, Forestry, and Mining Revenue of the State.*

At the establishment of responsible government in 1856, the control of lands was vested exclusively in the Parliament of New South Wales. At that date only 7,000,000 acres had been alienated, and approximately 191,000,000 acres of land were owned by the Crown. Nearly all these lands have been made available for settlement. Large areas are occupied under various leasehold tenures and are in course of sale on terms.

In a considerable area the State has reserved to itself mineral rights, which produce a substantial income from royalties. In addition, State forests and timber reserves and land within irrigation areas return revenue to the Government.

The receipts from lands, mineral resources, and forests credited to the Consolidated Revenue Fund during the last five years are shown below:—

TABLE 210.—Governmental Revenue, Receipts from Land, Minerals and Forests.

Particulars.	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£
Alienations ... ..	621,584	606,555	580,689	535,723	522,614
Leases ... ..	384,882	405,081	425,259	411,322	424,994
Western Lands (Leases, etc.) ... ..	116,634	119,495	118,621	119,028	114,852
Mining Occupation ... ..	323,825	374,797	318,265	341,608	332,844
Forestry ... ..	196,486	224,369	225,825	224,108	229,546
Miscellaneous ... ..	30,353	24,713	21,970	22,454	23,854
Total, Land Revenue ... ..	1,673,764	1,755,010	1,690,629	1,654,243	1,648,704

Royalties on minerals and one half of the royalties from timber and other forestry receipts are payable to Consolidated Revenue Fund. The balance of the forestry receipts is not included in the accounts of the Consolidated Revenue Fund, but is paid to a special fund and set apart for afforestation. Payments to the special fund amounted to £229,685 in 1944-45 and £192,730 in 1945-46.

Royalties on minerals which constitute the principal item of mining revenue amounted to £321,038 in 1945-46, and were in respect of coal £224,694, silver-lead-zinc, £86,087, and gold and other minerals, £10,257.

#### *Receipts for Services Rendered.*

Fees charged in respect of services rendered by the administrative departments which are within the ambit of the Consolidated Revenue Fund amount to a considerable sum. The principal items are shown below:—

TABLE 211.—Governmental Revenue, Receipts for Services Rendered.

Particulars.	Year ended 30th June—					
	1941.	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£	£
Harbour Rates and Fees, Pilotage, etc....	331,632	317,626	279,298	291,510	293,901	319,763
Fees—						
Registrar-General ... ..	163,101	148,409	109,492	115,617	137,299	185,729
Law Courts ... ..	227,175	203,082	193,406	190,555	200,994	203,656
Valuation of Land ... ..	52,824	47,690	53,749	54,354	56,614	62,403
Public Instruction Department... ..	117,807	111,900	118,906	149,458	164,003	181,580
Grain Elevators—Handling Fees, etc....	337,073	353,162	234,013	304,186	377,211	333,787
Maintenance of Inmates of Public Institutions ... ..	29,138	32,666	49,913	58,220	55,536	59,128
Maintenance of Patients in Mental Hospitals ... ..	135,436	134,059	147,663	155,505	160,083	165,509
Commonwealth Contributions—						
Maintenance of Pensioners in Institutions ... ..	49,170	35,539	57,809	56,712	60,742	85,365
Other Services ... ..	4,580	6,562	5,024	17,804	21,107	26,832
Other ... ..	144,952	148,689	177,557	187,734	180,562	198,483
Total ... ..	1,592,894	1,539,384	1,426,830	1,581,655	1,708,052	1,822,235

Receipts from pilotage, harbour and light dues in all ports, and from tonnage and wharfage rates, rents, etc., in ports other than Sydney and Port Kembla, are paid into the Consolidated Revenue Fund. The tonnage and wharfage rates, rents, etc., collected in the port of Sydney are paid into the Sydney Harbour Trust (Maritime Services Board) Fund, and those collected at Port Kembla are paid into the Port Kembla Haulage and Shipment Account. Both of these accounts are operated as separate business undertakings.

*General Miscellaneous Receipts.*

All items not placed under headings already shown are included in the general miscellaneous group:—

TABLE 212.—Governmental Revenue, General Miscellaneous Receipts.

Particulars.	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
Miscellaneous Interest Collections—					
Metropolitan Water Board Advances ...	£ 175,179	£ 172,704	£ 170,326	£ 167,771	£ 165,127
Country Water Supply & Sewerage Works...	24,322	24,848	21,110	20,285	20,427
Rural Bank Agencies ...	107,216	130,845	126,879	101,064	107,262
Daily Credit Balances with Banks ...	22,449	22,154	25,933	48,131	66,438
Advances—Shallow Bores, Wire Netting ...	13,514	16,558	15,459	18,518	16,151
Other Interest ...	47,855	55,146	44,272	63,850	125,392
Rents of Premises ...	34,306	34,998	37,763	37,689	39,230
Rents Darling Harbour Resumed Area ...	47,017	47,091	47,284	47,126	47,713
Fines and Forfeitures ...	83,492	103,209	101,890	108,533	134,524
Repayments—Advances for Unemployment Relief ...	68,442	21,923	19,189	25,220	18,063
Repayment—Balances not required ...	20,219	9,545	14,191	15,791	25,841
Repayments to Credit of Votes, previous years	353,354	550,066	846,240	794,720	928,121
State Lotteries (Gross Profit) ...	815,895	945,250	1,203,930	1,343,245	1,452,700
State Superannuation Board—Repayment of part Employers' contributions and Interest thereon ...	328,728	328,728	322,024	285,612	250,032
Tourist Bureau Collections ...	95,136	42,445	49,009	69,234	145,536
Prison Industries ...	62,218	77,724	74,534	89,297	93,895
Sale of Products, etc., of Departments ...	91,985	84,737	98,824	97,548	101,395
Water Conservation and Irrigation—Rents, Rates, etc. ...	18,019	6,861	7,549	6,941	13,035
Commonwealth—Special Contributions ...	116,000	551,696	226,798	154,078	115,773
Other Miscellaneous Receipts ...	87,773	73,595	95,578	4,005,349*	122,787
Total ...	2,613,217	3,300,813	3,549,382	7,500,911*	3,989,442

\* Includes exceptional items, £3,888,772, see page 257.

The receipt in 1944-45 of £638,772 for Garden Island comprised £303,000 for improvements at valuation in 1913 when the Commonwealth assumed control of the Island, and £335,772 as interest thereon at 3½ per cent.

Recoveries of amounts expended in previous years are usually taken to account as revenue in the item "Repayments to Credit of Votes, Previous Years." Such recoveries included recoups to the Governmental account of public debt charges due but not paid by business undertakings in earlier years, viz., £76,204, £137,392, £263,360, £313,597 and £572,705 in each of the last five years.

Special contributions by the Commonwealth were made in respect of free rail passes to members of the defence forces and emergency war expenditure, including air raid precautions. The contribution towards the cost of free rail passes amounted to £116,000 in 1941-42, £125,000 in 1942-43, £158,000 in 1943-44, £143,000 in 1944-45 and £109,200 in 1945-46.

*Governmental Expenditure.*

The Governmental expenditure from revenue during the last five years and the amount per head of population are shown in the following table. The ordinary departmental expenditure is classified according to functions. The annual contribution to railways £800,000 is included here but not in Table 207.

TABLE 213.—Governmental Expenditure, Functional Classification, 1942 to 1946.

Classification.	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
Amount.					
Ordinary Departmental—	£	£	£	£	£
Legislative and General Administration (exclusive of interest, etc., shown below)...	2,090,170	2,038,795	2,081,711	2,176,558	2,045,657
Maintenance of Law, Order, and Public Safety ... ..	2,820,816	2,892,770	3,067,528	3,144,630	3,335,050
Regulation of Trade and Industry... ..	117,663	115,929	128,966	135,428	167,250
Education ... ..	5,799,728	6,030,539	6,292,174	6,551,562	7,054,760
Science, Art and Research ... ..	74,828	91,784	92,062	94,739	122,939
Public Health and Recreation ... ..	2,975,951	3,275,057	3,666,929	3,890,582	4,475,299
Social Amelioration ... ..	2,623,785	1,765,853	1,632,641	1,486,240	1,381,553
Development and Maintenance of State Resources ... ..	4,699,156	3,904,542	4,089,701	4,486,069	4,523,309
Local Government ... ..	440,788	441,884	426,132	420,621	490,253
War Obligations—					
National Emergency Services, etc. ... ..	1,039,068	1,357,972	363,332	143,838	112,768
Other ... ..	408,692	297,464	588,207	479,512	511,168
Adjustment of Old Accounts ... ..	.....	409,675	325,000	312,454	665,427
Total Ordinary Departmental ... ..	23,090,545	22,622,264	22,754,383	23,322,233	24,886,423
Public Debt Charges*—					
Interest ... ..	5,681,482	5,537,094	5,531,178	5,461,383	5,329,443
Exchange on Interest ... ..	832,795	788,874	811,007	749,143	725,217
Sinking Fund ... ..	1,030,144	1,141,151	1,223,514	5,217,713†	1,250,222
Total Public Debt Charges ... ..	7,544,421	7,467,119	7,565,699	11,428,239	7,304,882
Total Governmental ... ..	30,634,966	30,089,383	30,320,082	34,750,472	32,190,305
Per Head of Population.					
Ordinary Departmental—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Legislative and General Administration ...	0 14 11	0 14 5	0 14 7	0 15 1	0 14 0
Maintenance of Law, Order and Public Safety ... ..	1 0 1	1 0 5	1 1 6	1 1 9	1 2 11
Regulation of Trade and Industry... ..	0 0 10	0 0 10	0 0 11	0 0 11	0 1 2
Education ... ..	2 1 5	2 2 7	2 4 1	2 5 5	2 8 5
Science, Art and Research ... ..	0 0 6	0 0 8	0 0 8	0 0 8	0 0 10
Public Health and Recreation ... ..	1 1 3	1 3 1	1 5 8	1 7 0	1 10 9
Social Amelioration ... ..	0 18 9	0 12 6	0 11 5	0 10 4	0 9 6
Development and Maintenance of State Resources ... ..	1 13 6	1 7 7	1 8 8	1 11 1	1 11 1
Local Government ... ..	0 3 2	0 3 1	0 3 0	0 2 11	0 3 4
War Obligations ... ..	0 10 4	0 11 9	0 6 8	0 4 4	0 4 3
Adjustment of Old Accounts ... ..	.....	0 2 11	0 2 4	0 2 2	0 4 7
Total Ordinary Departmental ... ..	8 4 9	7 19 10	7 19 6	8 1 8	8 10 10
Public Debt Charges*—					
Interest ... ..	2 0 7	1 19 1	1 18 9	1 17 11	1 16 7
Exchange on Interest ... ..	0 5 11	0 5 7	0 5 8	0 5 2	0 5 0
Sinking Fund ... ..	0 7 4	0 8 1	0 8 7	1 16 2†	0 8 7
Total Public Debt Charges ... ..	2 13 10	2 12 9	2 13 0	3 19 3	2 10 2
Total Governmental ... ..	10 18 7	10 12 7	10 12 6	12 0 11	11 1 0

\* See comment following this table.

† Includes special repayment of Deficiency Treasury Bills £3,840,000 (£1 6s. 7d. per head) direct to lender, not through sinking fund.

There has been steady growth in State expenditure on public health, mainly by way of increased assistance to hospitals, and in education and maintenance of law and order. Decreased expenditure on social amelioration in 1942-43 was due to discontinuance of the State system of widows' pensions (apart from children's allowances) upon the introduction of a Commonwealth system; also to smaller commitments for unemployment relief, following a sharp fall in the cost of this service in 1941-42. Details of State expenditure on the foregoing functions are given in the relevant chapters of this Year Book.

The State bore considerable costs in connection with air raid precautions, other war emergency services and travel concessions to members of the defence services. However, contributions by the Commonwealth and proceeds from realisation of assets, taken to account as receipts, provided partial offset to expenditure designated war obligations.

Entries giving rise to the item "Adjustment of Old Accounts" were in the nature of book-keeping adjustments. Their effect was to transfer to Consolidated Revenue Fund part of long standing overdraft balances of other Treasury Accounts to which certain expenditures incurred in earlier years had been charged. The amount in 1945-46 included an advance to the Sydney Harbour Bridge Account of £400,427, equal to the accumulated deficiency of the account at 30th June, 1944.

The public debt charges shown in the above table represent the balance paid from Governmental revenues of the State, and are exclusive of interest, exchange and sinking fund paid from earnings of business undertakings, etc. In accordance with the accountancy methods employed, the public debt charges, as paid, are debited to the Governmental section of the accounts, and are offset by recoups from business undertakings and other activities. When undertakings are unable to pay their due proportion of the debt charges the shortage remains as a charge to the Governmental account to be paid by the undertakings when finances permit. When such arrears of public debt charges are paid by undertakings they are included as a Governmental receipt in the year of payment under the heading "General Miscellaneous Receipt—Repayments to Credit of Votes, Previous Years," as in Table 212.

The total amount of public debt charges paid in respect of all State activities is shown in Table 235, which relates to interest and exchange, and Table 238, which relates to sinking fund.

#### *Road and Traffic Funds.*

Revenues derived by the State from the taxation and registration of road transport vehicles, licensing of drivers, etc., are paid into separate funds and devoted to road and traffic purposes. Particulars of the funds, (viz., Road Transport and Traffic, Public Vehicles, State Transport Co-ordination and Main Roads) are shown in the chapter, "Motor and Other Licensed Vehicles," of this Year Book.

The following table shows a brief classification of the receipts and payments of these funds in the years ended 30th June, 1944 to 1946. The Road Transport and Traffic Fund, which is included in the aggregate statement

of State revenue and expenditure shown in Table 207 is repeated below in order that the special finances provided by the State for road and traffic purposes may be viewed as a whole.

TABLE 214.—Motor Taxes, Fees, etc., Receipts and Disbursements.

Receipts.		Year ended June.			Disbursements.	Year ended June.		
		1944.	1945.	1946.		1944.	1945.	1946.
Road Transport and Traffic Fund.								
Registration, Drivers' ...	£	£	£	Administration, and Control ...	£	£	£	
Licenses, etc. ...	521,224	537,650	608,500	Traffic Facilities ...	457,542	404,580	449,147	
Miscellaneous ...	7,591	9,152	11,997	Paid to Road Making Authorities ...	3,361	6,013	7,228	
Total ...	528,815	546,802	620,497	Total ...	67,912	136,209	164,122	
Public Vehicles Fund (Special Deposits Account).								
Motor Tax, Public Vehicles ...	62,097	62,073	65,866	Traffic Facilities ...	5,782	5,499	5,708	
Omnibus Service License	11,923	12,524	12,861	Paid to Road Making Authorities ...	41,754	41,470	43,232	
Total ...	74,020	74,597	78,727	Paid to Tramways ...	6,376	6,287	6,404	
Total ...	74,020	74,597	78,727	Total ...	53,912	53,256	55,344	
State Transport (Co-ordination) Fund.								
Licenses ...	25,177	25,315	28,844	Administration and Transport Control ...	17,184	15,247	15,886	
Commercial Motor Transport Charges—				Paid to Railways	27,245	29,750	33,555	
Passenger ...	6,423	6,929	10,468	Paid to Tramways	40	40	...	
Goods ...	13,840	14,358	20,026	Total ...	44,469	45,037	49,441	
Permits, etc. ...	376	530	1,316					
Miscellaneous ...	1,157	1,670	561					
Total ...	46,973	48,802	70,215	Total ...	44,469	45,037	49,441	
Main Roads Special Deposits Accounts.								
Motor Tax (except Public Vehicles) ...	1,685,126	1,711,063	1,861,460	Paid to Road Making Authorities ...	1,685,126	1,711,063	1,861,460	
Total All Funds.								
Motor Tax ...	1,747,223	1,773,136	1,927,326	Administration and Control ...	474,726	419,827	465,033	
Registration, Drivers' ...				Traffic Facilities ...	9,143	11,512	12,936	
Licenses, etc. ...	521,224	537,650	608,500	Paid to Road Making Authorities ...	1,794,792	1,888,742	2,068,814	
Special Licenses, Charges Commercial Motor Vehicles ...	57,739	59,656	82,515	Paid to Railways and Tramways ...	33,661	36,077	39,959	
Miscellaneous ...	8,748	10,822	12,558	Total Payments ...	2,312,322	2,356,158	2,586,742	
Total Receipts ...	2,334,934	2,381,264	2,630,899					

The funds distributed amongst road-making authorities are paid for the most part to the Main Roads Department, and only small amounts to municipal and shire councils.

#### ACCOUNTS OF STATE ENTERPRISES.

The principal State enterprises are those usually known as business undertakings, viz., railways, tramways and motor omnibus services, and Sydney Harbour Works. The capital of these enterprises has been provided by the State Treasury, mostly from loan funds. Their financial operations are kept in a separate account in the State Treasury and these combined with the Governmental accounts (Consolidated Revenue and other funds) and the Road Transport and Traffic Fund form the State Revenue Budget.

Details regarding the individual business undertakings are published in the other chapters of this Year Book. Particulars of their revenue and expenditure during the year ended 30th June, 1946, are summarised in the following table:—

TABLE 215.—State Business Undertakings, Revenue and Expenditure, 1945-46.

Service.	Revenue.	Expenditure.					Surplus.
		Working Expenses.	Capital Debt Charges.			Total.	
			Interest.	Ex- change.	Sinking Fund.		
Business Undertakings—	£	£	£	£	£	£	£
Railways ... ..	32,113,410	24,707,822	5,240,000	721,000	1,295,000	31,963,822	149,588
Trams and Omnibuses							
Metropolitan—							
Tramways ... ..	4,070,752	5,427,336	{ 200,725 10,515	27,158	49,887	5,718,590	(—) 340,293
Omnibuses ... ..	1,301,545			1,409	1,560		
Total, Metropolitan	5,372,297	5,427,336	211,240	28,567	51,447	5,718,590	(—) 346,293
Newcastle—							
Tramways ... ..	299,444	555,974	{ 27,680 1,885	3,779	6,349	596,189	(—) 32,813
Omnibuses ... ..	203,932			247	275		
Total, Newcastle	563,376	555,974	29,565	4,026	6,624	596,189	(—) 32,813
Total, Trams and Buses	5,935,673	5,983,310	240,805	32,593	58,071	6,314,779	(—) 379,106
Sydney Harbour ...	1,420,187	640,703	399,540	54,150	97,267	1,191,660	228,527
Total, Business Undertakings ...	39,469,270	31,331,835	5,880,345	807,743	1,450,338	39,470,261	(—) 991

The railway revenue, as shown in the table, includes a contribution from the Consolidated Revenue Fund of £800,000—made annually since 1928-29—towards losses incurred on developmental country lines. In 1945-46 the railway accounts contained no provisions for reserves or for repayment of a Treasury advance for reconditioning tracks; such charges included in the working expenses of previous years are shown on page 258. The classification of expenditure on the railways as in the foregoing table differs from that adopted by the Commissioner for Railways, which includes with working expenses (£24,933,674) portion of the sinking fund charge used in writing off discarded assets, £246,526, but does not include loan management expenses £20,674 which the Commissioner appropriates from net earnings.

The working expenses of the tramways and omnibuses include interest on a temporary loan, £3,482, and loan management expenses, £996, which are treated in the accounts published by the Commissioner for Road Transport and Tramways as appropriations from net earnings. Charges for current depreciation are also included in working expenses, the total amount of £152,539 being distributed as follows, viz.: metropolitan tramways £98,851 and omnibuses £41,723, and Newcastle tramways £2,474 and omnibuses £9,486.

In addition to the business undertakings there are several State-owned utilities and trading concerns. The capital of such enterprises has been provided from State loan and revenue funds and, in some cases, from

surplus earnings. Their revenue accounts, however, have not been brought within the scope of the State Revenue Budget, although they are part of the Special Deposits Accounts in the Treasury. The following table shows the revenue and expenditure of the major State enterprises (other than the business undertakings) which were in operation during the last two years:—

TABLE 216.—State Enterprises, Revenue and Expenditure.

Enterprise.	Year ended 30th June, 1945.			Year ended 30th June, 1946.		
	Revenue.	Expenditure.	Surplus.	Revenue.	Expenditure.	Surplus.
	£	£	£	£	£	£
Water Supply—						
June* ... ..	13,346	17,904	(—) 4,558	12,471	18,504	(—) 6,033
South-West Tablelands* ...	47,011	66,643	(—) 19,632	44,953	68,985	(—) 24,032
Southern Electricity Supply ...	502,703	447,797	54,906	497,982	458,322	39,660
Metropolitan Meat Industry ...	854,719	944,237	(—) 89,518	880,718	936,435	(—) 55,717
Port Kembla Shipment, etc., † ...	61,570	65,631	(—) 4,061	54,055	63,434	(—) 9,379
State Coal Mine ... ..	326,784	303,732	23,052	292,609	292,850	(—) 241
Engineering and Shipbuilding † ...	906,122	856,079	50,043	990,022	949,583	40,439

\* Year ended 31st December.

† Year ended 31st March.

The State Government has controlled the Newcastle fish markets since December, 1943, and the Sydney fish markets since September, 1945; in the year ended 30th June, 1946, the operation of the markets resulted in a surplus of £9,468, revenue from commissions, rentals, etc., amounting to £59,826 and expenditure to £50,358. Action was taken in 1945-46 to re-establish the State Brick Works, but trading operations had not commenced by the end of the year. The activities of the Government Insurance Office of New South Wales are reviewed on page 331 *et seq.*

## CLOSER SETTLEMENT ACCOUNT.

The Closer Settlement Fund is maintained as a separate account, and its transactions are not included in the ordinary revenue budget of the State.

It was established under an Act passed in 1906 and replaced as from 1st July, 1928, by a new Closer Settlement Fund, incorporating its assets and liabilities and the Returned Soldier Settlement Accounts.

The capital of the Closer Settlement Fund was derived from loan moneys made available by the State, the issue of debentures in part payment for estates, Parliamentary appropriations from the Consolidated Revenue Fund, assurance fees paid in respect of property under the Real Property Act (until repealed on 9th December, 1940), and Crown lands used for closer settlement purposes.



A summary of transactions of the Closer Settlement Fund on a *cash or receipts and payments* basis, including both revenue and capital transactions, during the last five years is shown in the following table:—

TABLE 217.—Closer Settlement Fund, Receipts and Payments, 1942 to 1946.

Particulars.	Year ended 30th June.				
	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£
<b>Receipts—</b>					
Repayment of Principal, Interest, Rentals, etc. ...	470,069	699,250	737,933	492,917	616,124
Fees under Real Property Act ...	119	91	67	70	62
Sale of Inscribed Stock (Renewal) ...	.....	82,200	1,100	3,100	800
<b>Total Receipts</b> ...	<b>479,188</b>	<b>781,541</b>	<b>739,100</b>	<b>496,087</b>	<b>616,986</b>
<b>Payments—</b>					
Acquisitions, Improvements, etc. ...	2,476	1,175	917	1,562	754
Fire Insurance Premiums ...	2,782	2,283	2,483	2,105	1,783
Claims under Real Property Act ...	468	115	9	14	22
Administration ...	20,872	20,010	18,473	21,461	23,923
Interest ...	420,055	420,001	412,582	235,319	233,620
Contribution to Sinking Fund ...	68,781	72,481	79,793	89,640	88,555
Repayment of Inscribed Stock and Bonds ...	.....	82,200	1,100	3,100	800
<b>Total Payments</b> ...	<b>515,434</b>	<b>598,265</b>	<b>515,357</b>	<b>353,201</b>	<b>349,457</b>
<b>Excess of Receipts</b> ...	<b>*36,246</b>	<b>183,276</b>	<b>223,743</b>	<b>142,886</b>	<b>267,529</b>

\* Excess of payments.

The cash balance in the fund was £274,312 at 30th June, 1946.

The fund is required to pay interest on its loan debt and contribute to the National Debt Sinking Fund, but since 1932 has not been charged with a share of the exchange on interest paid on the State debt owing overseas. The charge for interest was reduced from 3½ per cent. to 2 per cent. from 1st July, 1944.

A large measure of relief has been granted to settlers in the form of reduction of capital value of the lands, and debts have been written off and interest charges, etc., reduced or suspended because of financial difficulties of settlers. As a result accounts compiled on an *income and expenditure* basis disclose a deficiency of £2,930,922 at 30th June, 1946. Particulars of the losses in the last three years are summarised below:—

TABLE 218.—Closer Settlement Fund, Income and Expenditure.

Income.	1943-44.	1944-45.	1945-46.	Expenditure.	1943-44.	1944-45.	1945-46.
	£	£	£		£	£	£
Interest ...	360,147	336,722	212,434	Interest ...	412,582	235,319	233,620
Rentals ...	19,431	32,851	86,130	Administration, etc.	19,806	22,431	24,708
Other ...	5,317	12,493	6,725	Debts written off	273,479	362,818	240,708
<b>Total</b> ...	<b>384,895</b>	<b>382,066</b>	<b>305,289</b>	Forfeitures, etc.	14,292	24,504	10,090
<b>Deficiency</b> ...	<b>335,264</b>	<b>263,006</b>	<b>203,835</b>	<b>Total</b> ...	<b>720,159</b>	<b>645,072</b>	<b>509,124</b>

Interest earnings declined and rentals rose as a result of an enactment in March, 1944, which gave to settlers acquiring holdings by instalment purchase the right to apply for conversion to leases in perpetuity at an annual rental equal to 2½ per cent. of outstanding indebtedness or, if less, of appraised value.

A summary of the balance-sheet at 30th June, 1946, is set out below:—

TABLE 219.—Closer Settlement Fund, Balance-sheet, 30th June, 1946.

Liabilities.		Assets.	
	£		£
Capital Funds—			
Loan—Commonwealth			
Inscribed Stock ...	12,441,549	Debtors ... ..	7,458,274
Less—Repaid, including		Land ... ..	3,725,293
Sinking Fund ...	804,851	Buildings, Plant, etc. ...	38,915
	11,636,698	Bank ... ..	274,312
Consolidated Revenue Fund...	1,635,000		11,496,794
Crown Lands ... ..	368,721	Accumulated Deficiency ...	2,930,922
Real Property Act Assurance			
Fund ... ..	787,297		14,427,716
	14,427,716		

#### LEDGER BALANCES.

The Audit Act provides that the Treasurer may arrange with any bank for the transaction of the general banking business of the State. The various accounts open at 30th June, 1946, are shown below. All amounts paid into any of the accounts mentioned are deemed to be “public moneys.” The special accounts, which consist of “Supreme Court Moneys,” are not controlled by the Audit Act, but directly by the officers in charge of the departments concerned.

TABLE 220.—State Accounts, Balance at 30th June, 1946.

Account.	Balance.	Account.	Balance.
Credit Balances.		Debit Balances.	
	£		£
Consolidated Revenue ... ..	1,469,709	General Loan ... ..	6,711,703
Government Railways ... ..	7,927,914	Loan Expenditure Suspense ... ..	68,728
Metropolitan Transport Trust ... ..	711,981	Advances for Departmental Working	
Newcastle and District Transport		Accounts and Other Purposes and	
Trust ... ..	56,969	Advances to be recovered ... ..	9,224,322
Sydney Harbour Trust ... ..	1,756,193	Metropolitan Water, Sewerage and	
Road Transport and Traffic ... ..	3,895	Drainage Board—Advance ... ..	4,639,733
State Transport (Co-ordination) ... ..	54,661	Debenture Deposit Account ... ..	5,500,000
Special Deposits ... ..	25,983,599	Treasurer's Investment ... ..	21,496
Special Accounts—Supreme Court ... ..	403,771	Debits not Transferred to Treasurer's	
Miners' Accident Relief ... ..	77,000	Public Accounts ... ..	140,425
Closer Settlement ... ..	274,312		
Total Credit Balances ... ..	38,720,004	Total Debit Balances ... ..	26,306,407

All the accounts are combined to form the “Treasurer's General Banking Account” in which the balances of the accounts in credit offset the over-drafts on others.

The account “Advances for Departmental Working Accounts and Other Purposes, and Advances to be Recovered” embraces a number of individual accounts which have been opened for the purpose of drawing against the Treasurer's General Banking Account to provide capital for Departmental Working Accounts and certain advances of a recoverable nature. The debit

balances at 30th June, 1946, consisted largely of sums advanced to Government accounts, the chief being the Railways Fund £5,875,000, Family Endowment Fund £2,223,984, Housing Commission £500,000, and Newcastle and District Transport Trust General Fund, £100,000. The advances as stated for Railways and Family Endowment Funds were made prior to 1932-33 and represent balances outstanding after repayments since 1940-41 of £1,175,000 and £275,000, respectively, from votes of the Consolidated Revenue Fund.

The Metropolitan Water, Sewerage and Drainage Board Advance Account represents the outstanding balance of repayable advances from the Treasurer's General Banking Account. These advances, amounting to £6,495,000, were made to the Board between April, 1925, and June, 1929, and are being paid by annual instalments of £243,314, including principal and interest, spread over a period of forty years.

The Debenture Deposit Account is a medium for the withdrawal, for investment in the Commonwealth Bank, of the net amount of cash held in other accounts which is not required for immediate use. The account was opened in December, 1945, when short-dated Treasury Bills, until then used for financing cash deficiencies, were funded into long-term debentures. Under the funding arrangements surplus cash, which formerly was applied to the temporary retirement of Treasury Bills, is deposited with the Commonwealth Bank, where it earns interest at the rate of 1 per cent., and may be withdrawn as required. The investment in the Commonwealth Bank is included in the Special Deposits Account.

The net ledger balances at 30th June in each of the last five years were represented by the following assets:—

TABLE 221.—State Accounts, Net Credit Balances, 1942 to 1946.

Balances held at 30th June, in—	1942.	1943.	1944.	1945.	1946.
<b>Sydney—</b>	£	£	£	£	£
General Cash Balance ... ..	2,918,843	3,232,400	3,315,702	2,150,477	1,897,821
Deposit with Commonwealth Bank ...	...	...	...	7,960,000	5,500,000
	2,918,843	3,232,400	3,315,702	10,110,477	7,397,821
<b>London—</b>					
Cash Balance ... ..	22,488	112,837	33,181	26,225	6,377
Remittances in Transit ... ..	1,725,000	1,872,000	1,856,000	1,865,000	1,660,963
Securities ... ..	2,452,984	2,592,821	2,796,290	2,979,151	3,348,431
<b>Total</b> ... ..	7,119,315	7,810,058	8,001,173	14,980,853	12,413,597

Cash applied to the temporary retirement of the Deficiency Treasury Bills at 30th June amounted to £3,300,000 in 1943 and £9,800,000 in 1944. These sums are to be regarded as the equivalent of deposits with the Commonwealth Bank in comparing cash balances of the earlier years with those in 1945 and 1946.

#### SPECIAL DEPOSITS AND SPECIAL ACCOUNTS.

The Special Deposits and Special Accounts form a very important division of the public finances, not only from the nature and volume of the transactions, but also by reason of the manner in which they are used in connection with the general finances of the State.

These funds are of great assistance in the banking operations of the Government. Although the Audit Act provides that the funds cannot be used except for the specific purpose for which they were deposited, it is the custom to merge balances into the "Treasurer's General Banking Account." By this means they provide a substantial reserve against which the Treasurer may draw to meet temporary requirements and to finance the overdrafts of other accounts. The great bulk of the funds bear interest, whether invested or not, and the power to use them enables the Government to effect a large saving in the interest which might otherwise be charged for loan accommodation.

The following table shows the amount of the Special Deposits and Special Accounts in each of the last five years.

TABLE 222.—Special Deposits and Special Accounts, 1942 to 1946.

Balance.	At 30th June.				
	1942.	1943.	1944.	1945.*	1946.*
	£	£	£	£	£
Cash ... ..	15,837,442	15,581,576	16,375,228	16,947,769	17,615,939
Securities ... ..	2,375,984	2,515,821	2,719,290	2,902,151	3,271,431
Total ... ..	18,213,426	18,097,397	19,094,518	19,849,920	20,887,370

\* Excludes "Debenture Deposit Account" £7,960,000 in 1945, and £5,500,000 in 1946.

The balance of cash at 30th June, 1946, consisted of Government funds £7,844,731 and moneys held on trust, in the nature of a Treasury liability, £9,771,208.

#### STATE LOAN FUNDS.

Moneys raised on loan by the State are credited to the General Loan Account, with the exception of loans used in funding revenue deficiencies, and small amounts credited to the Closer Settlement Fund for the conversion, at maturity, of portion of the fund's loan debt.

The loans credited to the General Loan Account comprise both new loans to be expended on works and services, and conversion or renewal loans for repayment of maturing loans. Additional credits are obtained from repayments to the account of loan moneys expended in earlier years. These repayments are derived mainly from the sale of land, works, materials, etc., acquired by means of loan funds, and the repayment of loan capital advanced to settlers and local governing and statutory bodies. Normally they constitute an important contribution towards the funds available for expenditure on new loan works.

The expenditure from the General Loan Account is subject to Parliamentary appropriation and consists of amounts expended on works and services, repayment of maturing loans—mostly from the proceeds of conversion loans—and the payment of flotation expenses and stamp duty on the transfer of stocks issued in London.

*Annual Loan Expenditure on Works and Services.*

Particulars of the loan expenditure on works and services by the State Government since 1901 are shown in the following table. The average annual amounts at intervals of five years are stated from 1901 to 1945 and the annual amounts during the last eleven years. Gross loan expenditure represents the new expenditure in each period; from this repayments to the loan account are deducted to obtain the net loan expenditure or net amount added to the accumulated loan expenditure outstanding.

TABLE 223.—Annual Loan Expenditure on Works and Services,  
1901 to 1946.

Year ended 30th June.	Gross Loan Expendi- ture.	Repay- ments of Amounts Spent in Previous Years.	Net Loan Expendi- ture.	Year ended 30th June.	Gross Loan Expendi- ture.	Repay- ments of Amounts Spent in Previous Years.	Net Loan Expendi- ture.
	£	£	£		£	£	£
1901-05*	3,441,660	226,920	3,214,740	1937	7,182,523	846,445	6,336,078
1906-10*	2,248,947	157,127	2,091,820	1938	8,110,740	3,009,875	5,100,865
1911-15*	7,032,586	357,577	6,675,009	1939	8,788,604	3,380,748	5,407,856
1916-20*	6,996,935	479,126	6,517,809	1940	6,945,371	1,059,105	5,886,266
1921-25*	11,829,369	1,220,688	10,608,681	1941	5,361,838	1,019,258	4,342,580
1926-30*	12,594,670	1,183,143	11,411,527	1942	4,618,419	1,460,388	3,158,031
1931-35*	6,700,108	712,895	5,987,213	1943	2,789,311	887,789	1,901,522
1936-40*	8,103,669	1,961,692	6,141,977	1944	3,029,172	1,617,633	1,411,539
1941-45*	3,787,497	1,280,200	2,507,297	1945	3,138,747	1,415,934	1,722,813
1936	9,491,108	1,512,288	7,978,820	1946	4,554,301	1,291,173	3,263,128

\* Annual average.

The expenditures shown in the table do not include flotation expenses and stamp duty on transfers of stock issued in London, which are paid from the proceeds of loans. Such expenses amounted to £36,740 in 1944-45 and £82,394 in 1945-46.

Transactions relating to Closer Settlement Debentures, £5,041,500, issued between 1914-15 and 1929-30 in part payment of large estates acquired for closer settlement, and Commonwealth advances for the construction of the Grafton-Kyogle-South Brisbane railway line, £1,419,593, expended between 1925-26 and 1930-31, are omitted from Table 223. Liability in respect of both items is reflected in the public debt of the State, but the transactions were not passed through the General Loan Account although they provided works and services of a type usually acquired from loans.

*Distribution of Annual Loan Expenditure.*

The principal items of the gross loan expenditure by the State Government on works and services, and of repayments to the loan account, during each of the past five years are as follows:—

TABLE 224.—Distribution of Annual Loan Expenditure, 1942 to 1946.

Work or Service.	Year ended 30th June.				
	1942.	1943.	1944.	1945.	1946.
	Gross Loan Expenditure				
	£	£	£	£	£
Railways... ..	2,242,500	1,990,051	2,227,064	1,600,000	2,356,517
Tramways ... ..	5,653	...	825	523	9,900
Water Supply, Sewerage and Drainage ...	101,573	80,594	49,157	72,379	79,350
Water Conservation and Irrigation—					
Murrumbidgee Irrigation Area ... ..	225,664	71,821	54,544	87,425	131,361
River Murray Commission and Settlement ...	13,100	100	...	200	150
Water and Drainage Trusts, etc. ... ..	204,973	44,622	45,572	63,975	127,530
Keepit Storage Reservoir ... ..	180,000	11,085	7,436	20,445	61,301
Other ... ..	9,756	3,032	1,005	9,905	90,131
Harbours, Rivers, Wharves, etc.—					
Sydney Harbour ... ..	79,315	57,556	53,000	59,100	98,400
Other ... ..	74,050	38,125	94,270	105,532	147,115
Roads, Bridges and Punts ... ..	679,701	64,330	14,193	6,598	338,074
Circular Quay Improvements ... ..	2,081	950	46	202	11,738
Industrial Undertakings, etc.—					
Electricity ... ..	162,501	74,326	95,151	137,151	315,518
Abattoirs, Tourist Resorts, Dredge Repair					
Shop, etc. ... ..	101,741	21,884	29,816	45,065	44,562
Agriculture, including Grain Elevators ...	5,269	30	2,750	1,932	1,721
Land Improvement, Settlement, etc. ...	107	23	3	...	248,484
Housing ... ..	204	62	...	618,477	...
Public Buildings, Sites, etc.—					
Courts, Police Stations and Gaols ... ..	13,706	4,848	11,738	4,913	13,373
Educational and Scientific ... ..	332,863	136,560	179,937	93,766	213,638
Hospitals and Charitable ... ..	112,119	118,876	136,175	169,911	220,132
Recreation Reserves, Parks, Baths, etc. ...	19,000	6,562	7,747	6,123	2,153
Administrative ... ..	3,029	4,348	680	3,821	1,425
Miscellaneous ... ..	14,367	12,616	7,482	7,177	13,213
Miscellaneous Works in Shires and Municipalities ... ..	84,547	46,310	9,778	24,116	28,515
Total Gross Loan Expenditure on Works and Services ... ..	4,618,419	2,789,311	3,029,172	3,138,747	4,554,301
	Repayments to Loan Account.				
	£	£	£	£	£
Railways... ..	562,450	439,320	718,234	414,378	81,563
Tramways ... ..	203,892	20,388	269,891	307,921	6,852
Omni-buses ... ..	...	718	51,758	450	2,260
Water Supply, Sewerage and Drainage ...	138,242	23,470	13,315	18,171	11,244
Water Conservation and Irrigation ... ..	98,750	144,227	168,000	51,510	104,860
Harbours, Rivers, Wharves, etc. ... ..	39,940	17,315	17,264	49,190	52,876
Roads, Bridges and Punts ... ..	73,090	54,146	83,010	50,005	53,889
Industrial Undertakings, etc. ... ..	35,648	24,471	72,178	33,997	105,037
Agriculture ... ..	160,005	...	...	...	4
Land ... ..	71	767	25,182	25,104	25,057
Housing ... ..	9	20,016	28,989	78,157	640,032
Public Buildings, Sites, etc. ... ..	8,455	5,362	5,212	2,561	6,047
Miscellaneous Works in Shires and Municipalities ... ..	611	2,583	17,263	7,541	2,463
Unemployment Relief Works, etc. ... ..	148,225	134,106	147,328	376,940	198,989
Total Repayments ... ..	1,460,388	887,789	1,017,033	1,415,934	1,291,173
Net Loan Expenditure on Works and Services ... ..	3,158,031	1,901,522	1,411,539	1,722,813	3,263,128

*Total Loan Expenditure.*

A broad view of the field of State capital investment is provided by the following table, which shows the aggregate loan expenditure on principal works and services from 1853 to 1946. It is apparent from the table that a large proportion of the loan expenditure has been devoted to the establishment of assets which provide essential aids to industry and community

services, and constitute valuable assets. Normally, these assets return sufficient revenue to pay a large proportion of the interest, sinking fund, etc., on the Public Debt. Some, however, are of a developmental character, and promote the growth of settlement and industry without earning any part of the capital debt charges on money spent in their construction. Transport services (i.e., railways, tramways and omnibuses) are the most important object of investment and account for 49.3 per cent. of the total loan expenditure; water, sewerage and drainage works represent 11.9 per cent., harbours and rivers 6.5 per cent., roads and bridges 6.1 per cent., and water conservation and irrigation, 5.8 per cent.

TABLE 225.—Accumulated Loan Expenditure on Works and Services, 1853 'to 1946.

Work or Service.	£	Work or Service.	£
Railways ... ..	162,123,952	Agriculture—	
Tramways ... ..	7,690,014	Grain Elevators ... ..	5,301,844
Omnibuses ... ..	379,350	Other, including Advances to Farmers ... ..	1,942,786
Water Supply, Sewerage and Drainage—		Land—	
Metropolitan ... ..	28,615,959	Closer Settlement and Returned Soldiers Settlement ... ..	11,927,286
Hunter District ... ..	7,408,359	Advances for Wire Netting, etc. ...	288,075
Country Towns ... ..	5,082,991	Crown Lands and Forests Improvements ... ..	258,223
Water Conservation and Irrigation—		Other ... ..	26,745
Water and Drainage Trusts, etc. ...	4,683,026	Housing—	
Murrumbidgee Irrigation Area ...	10,240,435	Observatory Hill Resumed Area ...	944,654
River Murray Commission ...	3,016,644	Other ... ..	843,541
River Murray Settlement and Coomealla Irrigation Area ...	210,170	Public Buildings, Sites, etc.—	
Wyangala Storage Reservoir ...	1,210,740	Courts, Gaols, Police and Fire Stations ... ..	1,528,505
Wentworth Irrigation Area ...	31,623	Educational and Scientific ...	8,980,323
Keepit Storage Reservoir ...	336,731	Hospitals and Charitable ... ..	5,355,626
Other ... ..	116,360	Recreation, Reserves Parks, Baths, etc. ... ..	966,818
Harbours, Rivers, Wharves, etc.—		Administrative ... ..	875,055
Sydney Harbour ... ..	12,267,842	Other ... ..	1,210,261
Other ... ..	10,253,478	Miscellaneous Works in Shires and Municipalities ... ..	1,774,430
Roads, Bridges and Punts (Harbour Bridge £8,070,216) ... ..	21,097,197	Unemployment Relief (including Grants and Repayable Advances to Shires and Municipalities) ...	16,435,823
Circular Quay Improvements ...	162,641	Immigration ... ..	569,930
Industrial Undertakings—		Other ... ..	89,283
Newcastle Dockyard, Dredge, Repairs, etc. ... ..	1,170,563	Works transferred to Commonwealth	3,964,653
Tourist Bureau and Resorts ...	174,052	Works in Queensland prior to Separation ... ..	49,855
Abattoirs and Meat Distributing ...	1,764,441	Total Loan Expenditure on Works and Services to 30th June, 1946 ...	345,176,337
Electricity ... ..	2,890,013		
Coal Mine ... ..	609,024		
Other ... ..	307,016		

At 30th June, 1946, the accumulated loan expenditure on works and services amounted to £345,176,337, and the public debt of the State was £353,239,936. The difference between the two amounts is due to a number of factors, such as the inclusion in the public debt of certain

items which are not recorded in the General Loan Account and the redemption of public debt from the sinking fund. The following statement furnishes a reconciliation:—

TABLE 226.—Reconciliation of Accumulated Loan Expenditure with Public Debt of State, 30th June, 1946.

	£	£
Accumulated Loan Expenditure from General Loan Account on Works and Services (Table 225)...	.....	345,176,337
Add—Loan Expenditure not shown in General Loan Account—		
Commonwealth Advance—Grafton—South Brisbane		
Railway ... ..	1,443,576	
Closer Settlement Debentures ... ..	1,144,450	
Advances to Settlers ... ..	120,050	
Immigration Debentures... ..	329,700	
Revenue Deficiencies ... ..	47,599,660	
Flotation and Negotiation Expenses ... ..	20,333,793	
		70,971,229
		416,147,566
Less—Redemptions of Public Debt from Revenue and Sinking Funds ... ..	51,339,194	
Debt cancelled by Commonwealth in respect of Properties transferred from State to Commonwealth ... ..	4,788,005	
Overdraft, General Loan Account ... ..	6,780,431	
		62,907,630
Public Debt at 30th June, 1946 (Tables 228 to 232) ...	.....	353,239,936

Thus the State loan expenditure to 30th June, 1946, consists of £348,214,113 expended on works and services of various kinds, £47,599,660 expended to meet revenue deficiencies and £20,333,793 being discounts allowed to lenders and other loan expenses. Of the total liability in respect of this expenditure £6,780,431 was covered by overdraft and the remainder, £409,367,135, by loans which have been offset to the extent of £56,127,199 by redemptions of debt from revenue and sinking fund and transfer of certain properties to the Commonwealth.

#### *Loan Raisings and Cost of Management, etc.*

Matters relating to the raising of loans by Australian Governments, with certain exceptions, are determined by the Australian Loan Council in terms of the Financial Agreement of 1927, to which reference is made on page 285. Operations incidental to the flotation of loans are conducted by the Commonwealth Government and the loans are secured by the issue of Commonwealth stock, debentures, bonds, etc. Each State is liable to the Commonwealth for the loans raised on its behalf.

At 30th June, 1946, the loans outstanding on account of the State of New South Wales amounted to £353,239,936, of which £197,198,139 was owing in Australia, £144,675,312 in London and £11,366,485 in New York. The greater part of these loans is represented by Commonwealth securities but a substantial amount of the overseas loans is secured by New South Wales securities issued prior to adoption of the Financial Agreement in



1927. Commonwealth securities in respect of the indebtedness of New South Wales comprise amounts of £197,198,059 in Australia, £104,811,188 in London and £3,892,633 in New York; and New South Wales securities £80 in Australia, £39,864,124 in London and £7,473,852 in New York.

Inscription and management of the Commonwealth securities are conducted by the Commonwealth Government, but the State is required to pay expenses allocated to its share of the total securities issued. Similar services in respect of New South Wales securities are performed by financial agents appointed by the State, viz., the Westminster Bank Ltd., in London, and Chase National Bank in New York. Commission and other expenses of management are charged to revenue; the amount was £50,188 in 1944-45 and £48,388 in 1945-46.

Expenses incidental to the issue of loans, such as underwriting commission, brokerage, advertising, printing, etc., are paid from the proceeds of loans. The amount in 1945-46 is shown on page 271.

The following table shows particulars of loans placed on the market by the Commonwealth Government since 1942 for public subscription in Australia, and the amounts allotted therefrom to New South Wales. These do not include a number of smaller loans raised by direct negotiation with financial institutions and Government instrumentalities. The total amount of loans raised by or on behalf of the State in the last five years is shown in Table 233.

TABLE 227.—Loans Raised by Public Subscription in Australia, 1942 to 1946.

Date of Flotation.	Floated by Commonwealth on Account of all Australian Governments.					Share Allocated to N.S.W. (Face Value).
	Face Value.		Price of issue.	Interest Rate.	Date of Maturity.	
	New.	Conversions.				
	£	£	£	per cent.		£
1942—February ... {	12,868,890	...	100	2½	1945-46	...
	35,462,360	...	100	3½	1950-58	...
June ... {	7,032,290	...	100	2½	1946-47	...
	30,341,190	...	100	3½	1950-58	...
November ... {	22,090,080	650,440	100	2½	1946-47	*362,000
	60,577,170	21,132,470	100	3½	1950-58	*11,806,350
1943—March ... {	18,660,730	...	100	2½	1947-48	...
	83,144,660	...	100	3½	1950-59	...
October ... {	24,500,600	...	100	2½	1947-48	...
	101,907,720	...	100	3½	1950-59	...
1944—March ... {	25,709,930	...	100	2½	1948-49	...
	124,838,810	...	100	3½	1950-60	...
September ... {	15,360,820	6,999,100	100	2½	1948-49	*899,060
	98,575,790	33,667,350	100	3½	1950-60	*5,419,920
1945—March ... {	12,342,000	...	100	2½	1949-50	...
	94,959,670	...	100	3½	1950-61	...
August ... {	...	13,498,220	100	2½	1949-50	1,496,000
	...	4,494,700	100	3½	1950-61	536,000
September ... {	24,101,910	...	100	2½	1949-50	...
	63,116,980	...	100	3½	1949-61	...
1946—March ... {	17,209,610	...	100	2	1948-49	...
	61,263,160	...	100	3½	1955-58	..
August ... {	...	4,593,070	100	2	1948-49	*326,000
	...	7,876,270	100	3½	1955-58	*557,000
October ... {	4,820,840	5,187,570	100	2	1949-50	†556,000
	64,930,260	9,459,700	100	3½	1955-58	†3,429,000

\* For conversions only. † Includes for conversions £349,000 and £636,000, successively.

The new loans raised publicly from October, 1941, to March, 1946, were used by the Commonwealth for war and rehabilitation purposes. In this period works programmes of the State on a restricted scale were financed from Treasury cash resources. The loan issued in October, 1946, marked the resumption of borrowing for State works.

No new loan money has been raised overseas by the State since 1931.

Moneys obtained by the Commonwealth by means of interest free loans and by the sale of war savings certificates and savings certificates are not included in the table.

The interest free loans were subscribed for war purposes, usually for the duration of the war and six months thereafter. To 30th June, 1946, subscriptions totalled £7,045,273 and repayments £4,645,131. The outstanding balance was £2,400,142 at 30th June, 1946.

War savings certificates were sold from March, 1940, until the introduction of savings certificates in June, 1946. The certificates may be cashed on demand and bear tax-free interest which is payable on redemption. On those issued prior to 1st March, 1947, the interest rate is  $3\frac{1}{4}$  per cent. per annum if held for the maximum term of seven years; subsequent issues bear interest at  $2\frac{5}{8}$  per cent. for a maximum term of five years. At maturity after seven years war savings certificates may be held for a further five years at the reduced interest rate of  $2\frac{5}{8}$  per cent. The maximum permissible investment in certificates is £450, individual holdings stated at purchase price being restricted to £200 in war savings certificates and £250 in savings certificates. The net amount raised in Australia (i.e., sales less repayments) was £54,677,088 to 30th June, 1946, including £8,812,575 in 1944-45 and £2,143,199 in 1945-46.

#### THE PUBLIC DEBT.

The public debt of New South Wales had its origin in 1841, when, on 28th December, the first loan amounting to £49,000 was offered locally. The first overseas loan was raised in London in 1854.

The growth of the debt to 1895 is described in earlier issues of the Year Book and subsequent movements are shown in the following table:—

TABLE 228.—Public Debt of New South Wales,\* 1901 to 1946.

At 30th June.	Long Term Debt.	Short Term Debt.	Total Public Debt.	Per Head of Population.
	£	£	£	£ s. d.
1901 ... ..	67,361,246	...	67,361,246	49 6 11
1906 ... ..	85,641,734	...	85,641,734	57 13 10
1911 ... ..	95,523,926	...	95,523,926	57 9 9
1916 ... ..	130,544,040	...	130,544,040	68 19 9
1921 ... ..	175,084,911	...	175,084,911	83 4 9
1926 ... ..	222,148,707	...	222,148,707	94 15 9
1931 ... ..	268,268,698	19,037,033	287,305,731	112 9 5
1936 ... ..	306,137,718	40,570,276	346,707,994	130 1 6
1938 ... ..	313,463,678	40,835,276	354,298,954	130 6 2
1939 ... ..	316,983,114	42,895,276	359,878,390	131 0 3
1940 ... ..	322,230,262	42,095,276	364,325,538	131 9 6
1941 ... ..	327,084,672	41,890,276	368,974,948	132 6 0
1942 ... ..	322,884,037	43,618,776	366,502,813	130 3 1
1943 ... ..	321,083,514	39,169,776	360,253,290	126 15 10
1944 ... ..	320,045,148	31,925,876	351,971,024	122 11 11
1945 ... ..	345,255,104	9,795,876	355,050,980	122 9 5
1946 ... ..	343,444,060	9,795,876	353,239,936	120 15 7

\* Includes oversea debt at book values, unadjusted for changes in relationship between Australian and overseas currencies, see page 278.

A large amount of special finance raised during the depression by the issue of Treasury Bills remained in the form of short-term indebtedness until 1944-45. The bills, mainly of three months currency, were discounted by the banking system. At 30th June, 1944, the bills issued amounted to £31,925,876 and bills temporarily retired but available for issue as required amounted to £9,800,000. The Treasury Bill finance available to the State at 30th June, 1944, was thus £41,725,876 of which £9,795,876 had been credited to Loan Account and expended on public works. The balance, utilised in financing revenue deficiencies and amounting to £31,930,000, was permanently liquidated in December, 1944, by the repayment of £3,840,000 from revenue account and £1,970,000 from the National Debt Sinking Fund, and the conversion of £26,120,000 into long-term debentures. These debentures were taken up by the Commonwealth Bank; they are repayable by instalments over a period of thirty-nine years and at 1 per cent. bear interest at the same rate as the Treasury Bills.

The decrease in the public debt after 1941 was due to redemptions from Sinking Fund and the temporary retirement of deficiency Treasury Bills, coupled with the cessation, owing to war conditions, of borrowing for public works. The increase in 1944-45 resulted from the re-issue of Treasury Bills under the funding arrangement described above and the renewal in Australia at a higher amount in Australian currency of a maturing London loan which previously had been recorded in sterling.

In considering the rate of growth of the debt, attention should be paid to variations in the purchasing power of the money expended, the steady growth of population throughout the period, the economic development of the State, as measured by the growth of its wealth, income and productiveness, and the earning power of the works constructed from loans.

Furthermore, comparisons of the rate of growth of the State debt with that of other States of Australia should take into account the differences in the distribution of governmental functions as between the central and local governments and the inclusion or non-inclusion of the capital debts of public utilities controlled by governmental authority.

Similarly, in making international comparisons care should be taken to allow for differences in the distribution of debt as between central, provincial and local governments and the existence or otherwise of reproductive assets acquired from loan funds.

#### *Domicile of Public Debt.*

For many years the London money market was the principal source of New South Wales loan moneys. Loan funds amounting to £10,273,973 in 1926-27, and £3,955,615 in 1927-28 were obtained in New York.

Since 1931 the State's requirements for new loan capital have been met from local resources. The total of oversea debt has therefore declined as a result of redemptions through the sinking fund and repayment of maturing London loans (£5,895,231 in 1944-45 and £1,086,787 in 1945-46) from loans raised locally.

The following table shows the amount of State public debt outstanding in Australia, London and New York at quinquennial intervals from 1901 to 1936 and annually from 1939.

TABLE 229.—Public Debt of New South Wales, Place of Domicile,  
1901 to 1946.

At 30th June.	Public Debt Outstanding—				Proportion.	
	Australia.	Oversea.		Total Public Debt.	Australia.	Oversea.
		London.	New York.			
	£ (Aust.)	£ (Stg.)	£*	£	Per cent.	Per cent.
1901	12,690,796	54,670,450	...	67,361,246	18·84	81·16
1906	19,726,884	65,914,850	...	85,641,734	23·03	76·97
1911	29,968,321	65,555,605	...	95,523,926	31·37	68·63
1916	43,390,452	87,153,588	...	130,544,040	33·24	66·76
1921	66,667,308	108,417,603	...	175,084,911	38·08	61·92
1926	81,826,091	140,322,616	...	222,148,707	36·83	63·17
1931	107,501,666	165,978,441	13,825,624	287,305,731	37·42	62·58
1936	172,099,601	161,437,120	13,171,273	346,707,994	49·64	50·36
1939	188,413,400	158,751,952	12,713,038	359,878,390	52·35	47·65
1940	193,088,910	158,697,020	12,539,608	364,325,538	53·00	47·00
1941	197,961,784	158,696,920	12,316,244	368,974,948	53·65	46·35
1942	198,914,999	155,517,949	12,069,865	366,502,813	54·27	45·73
1943	194,047,014	154,342,616	11,863,660	360,253,290	53·86	46·14
1944	186,888,244	153,413,716	11,669,064	351,971,024	53·10	46·90
1945	197,566,662	145,922,107	11,562,211	355,050,980	55·64	44·36
1946	197,198,139	144,675,312	11,366,485	353,239,936	55·83	44·17

\* Repayable in "Dollars"—converted at rate of 4·8665 dollars to £.

The public debt as shown in Tables 228 to 232 represents the amounts used for book-keeping purposes, without adjustment for changes in the value of Australian currency relatively to English and American currencies which have been considerable since 1929. The London debt, therefore, represents the amount repayable in sterling, and the New York debt represents the amount repayable in dollars converted at the rate of 4·8665 dollars to £1.

*Domicile and Rates of Interest on Public Debt.*

The following tables show the amount of New South Wales public debt in the various registers and the rates of interest as at 30th June, 1946:—

TABLE 230.—Public Debt of New South Wales at 30th June, 1946.  
Domicile and Rates of Interest.

Rate per cent.	Public Debt Outstanding.			Total Public Debt.	Annual Interest.
	Australia.	London.	New York.		
Short Term Securities— £ s. d.	£(Aust.)	£ (Stg.)	£*	£	£
2 5 0 ... ..	...	9,795,876	...	9,795,876	220,407
Long Term Securities—					
5 5 0 ... ..	...	17,870,500	...	17,870,500	938,201
5 0 0 ... ..	...	1,000	7,473,852	7,474,852	373,743
Total, £5 and over ...	...	17,871,500	7,473,852	25,345,352	1,311,944
4 10 0 ... ..	...	...	3,892,633	3,892,633	175,169
4 0 0 ... ..	31,458,186	28,988,931	...	60,447,117	2,417,885
Total, £4 and under £5 ...	31,458,186	28,988,931	3,892,633	64,339,750	2,593,054
3 17 6 ... ..	23,095,050	...	...	23,095,050	894,933
3 15 0 ... ..	16,197,890	7,607,632	...	23,805,522	892,707
3 12 6 ... ..	1,931,000	...	...	1,931,000	69,999
3 10 0 ... ..	...	33,477,901	...	33,477,901	1,171,727
Total, £3 10s. and under £4	41,223,940	41,085,533	...	82,309,473	3,029,366
3 9 9 ... ..	27,100	...	...	27,100	945
3 7 6 ... ..	7,262,870	...	...	7,262,870	245,122
3 5 0 ... ..	59,450,796	1,871,022	...	61,321,818	1,992,959
3 2 6 ... ..	2,000	...	...	2,000	62
3 2 0 ... ..	473,011	...	...	473,011	14,663
3 0 0 ... ..	12,238,752	45,060,500	...	57,299,252	1,718,978
2 14 3 ... ..	291,421	...	...	291,421	7,905
2 10 0 ... ..	18,538,484	...	...	18,538,484	463,462
2 6 6 ... ..	645,653	...	...	645,653	15,011
1 0 0 ... ..	25,585,846	...	...	25,585,846	255,858
Matured ... ..	80	1,950	...	2,030	...
Total, under £3 10s. ...	124,516,013	46,933,472	...	171,449,485	4,714,965
Total Long Term ...	197,198,139	134,879,436	11,366,485	343,444,060	11,649,329
Total Public Debt ...	197,198,139	144,675,312	11,366,485	353,239,936	11,869,736

\* Repayable in "Dollars"—converted at the rate of 4·8665 dollars to £.

The amount of annual interest as shown in the table represented an average rate of 3.36 per cent. on the face value of the debt at 30th June, 1946, and the corresponding rates on the debt on the several registers were: Australia 3.11 per cent., London 3.59 per cent. and New York 4.83 per cent.

Rates thus calculated take no account of the fact that portion of the debt has been issued at a discount; consequently they understate the actual interest charge on cash proceeds of the debt. Nevertheless, a comparison of the average nominal rates of interest gives some indication of the effect upon the State finances of the general decline in interest rates since 1931.

TABLE 231.—Public Debt of New South Wales, Annual Interest and Average Nominal Interest Rates, 30th June, 1931, to 1946.

Debt Outstanding.	1931.	1932.	1936.	1939.	1945.	1946.
<b>Australia—</b>						
Debt ... .. £000	107,502	127,143	172,100	188,413	197,567	197,198
Annual Interest ... £000	5,741	5,043	5,824	6,418	6,148	6,133
Average Rate ... per cent.	5.34	3.97	3.38	3.41	3.11	3.11
<b>London—</b>						
Debt ... .. £000	165,978	164,972	161,437	158,752	145,922	144,675
Annual Interest ... £000	7,841	7,837	6,010	5,901	5,561	5,188
Average Rate ... per cent.	4.72	4.75	3.72	3.72	3.81	3.59
<b>New York—</b>						
Debt ... .. £000	13,826	13,608	13,171	12,713	11,562	11,367
Annual Interest ... £000	672	661	639	616	559	549
Average Rate ... per cent.	4.86	4.86	4.85	4.85	4.83	4.83
<b>Total—</b>						
Debt ... .. £000	287,306	305,723	346,708	359,878	355,051	353,240
Annual Interest ... £000	14,254	13,541	12,473	12,935	12,268	11,870
Average Rate ... per cent.	4.96	4.43	3.60	3.59	3.46	3.36

Though the public debt increased by 22.9 per cent. between 1931 and 1946, annual interest thereon decreased by 16.7 per cent. with the decline in the average interest rate from 4.96 per cent. to 3.36 per cent.

Ordinarily the interest bill of the State is slow to reflect changes in the level of market rates, which take effect gradually as new loans and conversions of maturing loans to which they apply, increase in ratio to the total debt. The substantial decline in the average rate in 1931-32 was a result of the general conversion of debt registered in Australia in accordance with plans adopted in the depression to achieve a reduction of 22½ per cent. in interest rates generally. Subsequent decreases were due in part to the growth of short-term debt to finance revenue deficiencies, on which the rate of interest was reduced in stages from 4 per cent. in 1932 to 1 per cent. in 1945. Statements showing the yields on Government securities sold on the Stock Exchange in Australia and the rates of discount on Treasury Bills appear in the chapter "Private Finance" at pages 311 and 312.

#### *Domicile and Term of Public Debt.*

The dates of repayment of the debt extend to 1983 and the amounts falling due for redemption in successive years vary considerably as will be seen from the following table, which shows the amount outstanding as

at 30th June, 1946, in Australia, in London and in New York, according to the latest due dates for repayment:—

TABLE 232.—Public Debt of New South Wales, at 30th June, 1946, Domicile and Dates of Maturity.

Year of Maturity (ended 30th June).	Public Debt Outstanding—			Total Public Debt.
	Australia.	London.	New York.	
	£000 (Aust.).	£000 (stg.).	£000*	£000
Short Term Debt ...	...	9,796	...	9,796
Long Term Debt—				
1947 ... ..	2,820	10,865	...	13,685
1948 ... ..	7,430	...	...	7,430
1949 ... ..	16,540	12,174	...	28,714
1950 ... ..	20,946	...	...	20,946
1951 ... ..	6,509	11,707	...	18,216
1952 ... ..	10,281	...	...	10,281
1953 ... ..	378	11,790	...	12,168
1954 ... ..	4,900	11,018	...	15,918
1955 ... ..	13,373	...	...	13,373
1956 ... ..	14,353	...	3,893	18,246
1957 ... ..	12,362	...	3,707	16,069
1958 ... ..	22,304	38,011	3,767	64,082
1959 ... ..	17,622	3,829	...	21,451
1960 ... ..	9,235	...	...	9,235
1961–1965 ... ..	14,414	24,338	...	38,752
1966–1970 ... ..	3,601	1,871	...	5,472
1971–1975 ... ..	4,488	9,273	...	13,761
1976–1980 ... ..	5,593	...	...	5,593
1981–1983 ... ..	3,614	...	...	3,614
Interminable ... ..	363	...	...	363
Permanent ... ..	1	1	...	2
Government Option ...	6,071	...	...	6,071
Overdue ... ..	...	2	...	2
Total, Long Term	197,198	134,879	11,367	343,444
Total Public Debt	197,198	144,675	11,367	353,240

\* Repayable in "Dollars"—converted at rate of 4·8665 dollars to £1.

The loans have been classified according to the latest date of maturity, but some of them are redeemable earlier at the Government's option, subject to notice ranging up to twelve months being given.

Of the loans outstanding at 30th June, 1946, loans amounting to £58,081,448 had passed the earliest maturity date and £6,070,723 was issued on terms placing redemption within the option of the Government. These loans comprise £7,756,923 in Australia, £45,028,763 in London and £11,366,485 in New York.

The following table indicates the movements which have taken place in the public debt of New South Wales during the last five years. It shows the conversion loans and new loans raised, including those arranged privately as well as those publicly subscribed shown in Table 227; also redemptions from conversions, sinking fund and the loan account.

TABLE 233.—Transactions on Public Debt of New South Wales, 1942 to 1946.

Particulars.	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
<b>Long Term Loans Raised—</b>	£	£	£	£	
Conversion or Renewal Loans—					
London—					
Cash Subscribed and Converted					
Stocks ... ..	7,480,054	10,735,508	...	...	15,644,922
Discounts ... ..	37,688	219,092	...	...	281,100
Australia—					
Cash Subscribed and Converted					
Stocks* ... ..	29,783,430	15,196,630	6,734,610	(a) 14,928,480	(b) 3,395,360
Discounts ... ..	...	...	...	...	...
Total Conversions ...	37,301,072	26,151,230	6,734,610	14,928,480	19,321,382
<b>New Loans—</b>					
Australia—					
Cash subscribed ...	1,503,000	...	105,000	†26,120,000	...
Discounts ... ..	...	...	...	...	...
Total New Loans	1,503,000	...	105,000	26,120,000	...
Total Long Term Loans Raised	38,804,072	26,151,230	6,839,610	41,048,480	19,321,382
<b>Long Term Loans Repaid from—</b>					
Conversion and Renewal Loans—					
London ... ..	†9,766,564	10,735,508	...	5,896,231	16,731,709
Australia ... ..	29,783,430	15,196,630	6,734,610	7,536,080	2,032,800
Sinking Fund—					
London and New York ... ..	2,899,928	451,331	379,596	1,702,231	636,833
Australia ... ..	554,780	1,567,980	763,770	703,982	1,731,084
Loan Accounts ... ..	5	305	...	...	...
Total Long Term Loans Repaid	43,004,707	27,951,754	7,877,976	15,838,524	21,132,426
Net Increase in Long Term Debt ...	(—) 4,200,635	(—) 1,800,524	(—) 1,038,366	25,209,956	(—) 1,811,044
Net Increase in Short Term Debt ...	1,728,500	(—) 4,449,000	(—) 7,243,900	(—) 22,130,000	...
Net Increase in Public Debt ...	(—) 2,472,135	(—) 6,249,524	(—) 8,282,266	3,079,956	(—) 1 811,044

\* Includes loans raised in Australia. (a) £A7,392,400 and (b) £A1,362,560 for conversion of London loans £Stg5,896,231 and £stg1,086,787. † Issued at 1 per cent. for funding Short Term Debt. ‡ Includes £2,286,510 converted into Short Term Debt. (—) Decrease.

### *Loans Guaranteed by the State.*

In addition to liability for its own loans, the State has guaranteed, in terms of various Acts, the loans and overdrafts of certain corporate bodies and institutions, etc., engaged, as a rule, in the promotion of public welfare and development. The guarantees extend to all loans issued by certain corporate bodies, the issue of the loans being subject to the Governor's approval. In other cases, with minor exceptions, the guarantee is given by the Treasurer with the Governor's approval and on the recommendation of the appropriate administrative authority.



The loans and overdrafts under State guarantee as at 30th June, 1946, are summarised in the following statement. The amounts shown do not indicate the net amount of the contingent liability of the State, because sinking funds for repayment have been accumulated in respect of some of the loans. Furthermore, the amounts shown under the Government Guarantees Act, 1934-1943, represent the limit of overdrafts and not the amount outstanding.

TABLE 234.—Loans Guaranteed by State, 30th June, 1946.

Loans Issued by—		£	£
Metropolitan Water, Sewerage and Drainage Board ...		28,602,702	
Hunter District Water Board ... ..		3,650,000	
Broken Hill Water Board ... ..		286,391	
Rural Bank of New South Wales ... ..		21,523,197	
Public Hospitals ... ..		2,127,914	
Municipal, Shire, and County Councils ... ..		631,386	
Fire Commissioners ... ..		37,500	
			56,859,090
Overdrafts and Advances (under Government Guarantees Act, 1934-1943—Limit of Guarantee)—			
Hospitals ... ..		4,787	
Co-operative Building Societies ... ..		23,779,825	
Other Co-operative Societies, Marketing Boards, etc. ...		1,030,223	
Film Producing Companies ... ..		25,000	
Miscellaneous ... ..		5,250	
			24,845,085
Advances to Settlers (Government Guarantee) Act, 1929-1934—			
Rural Bank Borrowers ... ..		.....	187,952

Of the loans issued by the Metropolitan Water, Sewerage and Drainage Board, £2,000,000 is repayable in sterling in London and £1,282,852 in New York in dollars (converted at the rate of \$4.86 to the £). An amount of £47,515 included in municipal, shire and county council loans, representing the net amount outstanding after deducting sinking fund balances, is repayable in sterling in London.

#### THE INTEREST BILL OF THE STATE.

The amount of *annual interest* on the public debt of New South Wales as at 30th June, 1946, is shown in Table 230 as £11,869,736. This amount is calculated to represent a full year's interest at the rates applicable to the various loans outstanding at that date. It differs, therefore, from the amount of interest *actually* paid which embodies the effects of changes in the composition of the loan debt during the year, and includes interest paid on temporary deposits lodged with the Government.

The amount of interest *actually paid* during the year ended 30th June, 1946 was £12,501,678, viz., £12,024,084 on Debentures and Funded Stocks, £220,407 on Treasury Bills, £257,187 on moneys held temporarily by the Government. The amount paid overseas was £6,040,714, viz., £5,483,327 in London and £557,387 in New York; and £6,460,964 was paid in Australia.

The amounts of overseas interest payments are recorded for book-keeping purposes in the same terms as the amounts of overseas debt, as explained on page 278. An additional charge is, therefore, incurred in acquiring, at current rates, the sterling and dollar funds with which to pay interest in London and New York. The additional charge, which is taken into account as exchange, amounted to £1,640,060 in the year ended 30th June, 1946.

The following table shows the amount of interest *actually paid* on the public debt in Australia, London and New York at intervals since 1901; also the interest paid on moneys temporarily held by the Government (*i.e.*, bank overdrafts and Special Deposits accounts) and in recent years the cost of exchange on overseas interest payments.

TABLE 235.—Interest and Exchange on Public Debt and Temporary Advances, Amount Paid, 1901 to 1946.

Year ended 30th June.	Interest Paid on—				Total Interest Paid.	Exchange on Overseas Interest Payments.	Total Interest and Exchange.
	Public Debt.			Moneys in Temporary Possession of Government.			
	Australia.	London.	New York.				
	£	£	£	£	£	£	£
1901 ...	355,354	1,991,499	...	151,604	2,498,457	...	2,498,457
1911 ...	914,967	2,321,489	...	81,001	3,317,457	...	3,317,457
1921 ...	2,690,626	4,422,115	...	416,691	7,529,432	...	7,529,432
1931 ...	5,517,620	7,256,883	583,567	768,651	14,126,721	536,645	14,663,366
1936 ...	5,594,412	6,643,050	640,785	278,511	13,156,758	1,846,921	15,003,679
1938 ...	6,130,044	6,110,252	632,720	265,430	13,138,446	1,638,115	14,776,561
1939 ...	6,279,857	5,884,254	621,922	318,921	13,104,954	1,666,828	14,771,782
1940 ...	6,591,090	5,863,608	614,016	349,582	13,418,296	1,781,816	15,200,112
1941 ...	6,588,214	5,875,452	604,389	346,566	13,414,621	1,801,558	15,216,179
1942 ...	6,594,663	5,840,851	592,622	299,140	13,327,276	1,785,609	15,112,885
1943 ...	6,415,918	5,712,759	581,354	321,404	13,031,435	1,747,334	14,778,769
1944 ...	6,221,591	5,767,198	573,314	287,376	12,849,479	1,756,858	14,606,337
1945 ...	6,117,148	5,637,150	560,954	264,774	12,580,026	1,718,235	14,298,261
1946 ...	6,203,777	5,483,327	557,387	257,187	12,501,678	1,640,060	14,141,738

A proportion of the interest and of the exchange on interest payments overseas is allocated to the various business undertakings and other activities that have been provided with capital from State loan funds and are conducted as separate enterprises or accounts, and the balance is paid from the Consolidated Revenue Fund. Payments by the undertakings in respect of the current year's charges amounted in 1944-45 to £7,118,643 for interest and £969,092 for exchange, and in 1945-46 to £7,172,235 and £914,843, respectively. In addition a considerable amount of interest, etc., accrued to the Consolidated Revenue Fund as revenue from various other objects on which loan moneys have been expended. Payments of interest and exchange in the last two years included the following:—

TABLE 236.—Public Debt, Interest and Exchange Payments by State Undertakings.

Undertakings, etc.	1944-45.		1945-46.	
	Interest.	Exchange on Interest.	Interest.	Exchange on Interest.
	£	£	£	£
Railways ... ..	5,350,000	760,000	5,240,000	721,000
Tramways and Motor Omnibuses ... ..	268,157	37,558	240,806	32,592
Closer Settlement Fund ... ..	235,319	...	233,620	...
Metropolitan Water, Sewerage and Drainage Board ... ..	455,085	63,600	451,534	60,940
Hunter District Water Board ... ..	111,914	15,700	111,300	15,044
Maritime Services Board (Sydney Harbour) ... ..	410,000	57,400	391,576	52,962
Sydney Harbour Bridge ... ..	4,000	...	211,946	...
Main Roads Department ... ..	140,492	20,250	147,583	18,207
Southern Electricity Supply ... ..	92,897	13,003	93,390	12,671

A classification of the public debt of New South Wales as at 30th June, 1946, according to the nominal rates of interest payable, is shown in Table 230.

The average "effective rates of interest" quoted below are calculated on the basis of the amount of interest actually paid and take into account changes in the composition of the debt during each year by reason of the flotation of new loans, conversion of old loans and redemptions from sinking funds, etc. The rate was 3.66 per cent. in 1900-01, and the lowest rate since that year was 3.489 per cent. in 1912-13. During the next ten years there was a gradual rise to 5.1606 per cent. in 1922-23. Variations since 1928-29 are shown below:—

TABLE 237.—Interest on Public Debt of New South Wales, Average Effective Rates, 1929 to 1946.

Year ended 30th June.	Rate Per cent.	Year ended 30th June.	Rate. Per cent.	Year ended 30th June.	Rate. Per cent.
1929 ...	5.14062	1935 ...	3.92041	1941 ...	3.66042
1930 ...	5.17204	1936 ...	3.81666	1942 ...	3.62519
1931 ...	5.14421	1937 ...	3.70787	1943 ...	3.59375
1932 ...	4.85673	1938 ...	3.66774	1944 ...	3.61055
1933 ...	4.37804	1939 ...	3.67296	1945 ...	3.60326
1934 ...	4.12554	1940 ...	3.67829	1946 ...	3.50954

#### REDEMPTIONS AND SINKING FUNDS.

An account of the debt redemptions and sinking funds of New South Wales prior to the transfer to the National Debt Commission in terms of the Financial Agreement, was published on pages 170 and 171 of the Official Year Book for 1929-30. The present sinking fund is described below.

#### FINANCIAL RELATIONSHIPS BETWEEN COMMONWEALTH AND STATES.

The history of the financial relationships existing between the Commonwealth and States since federation in 1901 has been sketched in earlier issues of this Year Book.

#### *Financial Agreement, 1927.*

The financial agreement between the Commonwealth and States was brought into operation as from 1st July, 1927. The provisions were outlined on page 682 of the 1930-31 Year Book, and full details are given in the Commonwealth Year Book, 1938, on pages 21 to 33.

In terms of the agreement the Australian Loan Council was created to co-ordinate public borrowing. All borrowings by the States are arranged by the Commonwealth, in accordance with the decisions of the Council, which consists of a Minister of the Commonwealth and of each State. The Council determines the amount, rates and conditions of loans to be raised

after consideration of the annual programmes submitted by the Commonwealth and by each State. In June, 1939, by common consent, the borrowings of local governing and semi-Governmental authorities were brought within the purview of the Loan Council.

On 1st July, 1929, the Commonwealth took over the debts of the States, and assumed, as between the Commonwealth and States, the liabilities of the States to bondholders.

The Commonwealth also relieved the States of the liability of principal, interest and sinking fund on an amount of debt equal to the value of properties transferred to the Commonwealth after federation.

The Commonwealth, as agent for the States, has agreed to pay to bondholders interest due on the public debt of the States and, for a period of fifty-eight years from the 1st July, 1927, to contribute £7,584,912 per annum towards the interest, the States to pay the balance to the Commonwealth. After this period the States will pay to the Commonwealth the whole of the interest due. The contribution by the Commonwealth is equal to the amount paid by the Commonwealth to the States in 1926-27, at the rate of 25s. per head of population, and the contribution to New South Wales is £2,917,411 per annum.

#### *National Debt Sinking Fund.*

A national debt sinking fund was established in terms of the financial agreement, and is controlled by the National Debt Commission. The annual payments to the fund on account of State debts are contributed partly by the Commonwealth and partly by the States. The contributions in respect of New South Wales debt commenced as from 1st July, 1928, one year after the commencing date of other States.

Contributions in respect of the net debt outstanding on 1st July, 1927, are payable for a period of fifty-eight years at the rate of 7s. 6d. per cent. per annum, the Commonwealth contributing 2s. 6d. per cent. and the State 5s. per cent. The rate on new loans raised after 1st July, 1927, other than revenue deficiency loans, is 10s. per cent. for a period of fifty-three years, of which the Commonwealth pays 5s. and the State 5s. The State's contribution may be increased to shorten the period of repayment of loans expended on wasting assets. Contributions on special revenue deficiency loans incurred during the depression were at the rate of 10s. per cent. shared equally by the Commonwealth and State until 30th June, 1944, when the rate was increased to 20s. per cent. (Commonwealth 5s. and State 15s.) to provide for repayment in thirty-nine years. On other loans raised to meet revenue deficiencies, annual contributions at a rate not less than 4 per cent. are payable by the State. Loan securities redeemed and repurchased by the sinking fund are cancelled and the State is required to pay interest at the rate of  $4\frac{1}{2}$  per cent. per annum on the cancelled securities, in addition to the contributions stated above. Additional contributions are paid by the State to recoup the sinking fund for appropriations from it to meet discounts on conversion loans; the contribution in respect of each conversion loan is spread over the currency of the loan.

The operations of the National Debt Sinking Fund in regard to the debts of the State of New South Wales during each of the last ten years, and the aggregate since 1st July, 1928, are shown below:—

TABLE 238.—National Debt Sinking Fund, Transactions on Account of New South Wales.

Year ended 30th June.	Receipts.						
	Contributions by—				Interest.	Total Receipts.	
	Common- wealth.	State of New South Wales—					
		On Loans Issued.	4½% on Cancelled Securities.	Total New South Wales.			
1937 ... ..	£ 616,767	£ 998,834	£ 501,555	£ 1,500,389	£ 20,318	£ 2,137,474	
1938 ... ..	628,400	1,046,631	598,154	1,644,785	14,291	2,287,476	
1939 ... ..	635,913	1,081,877	696,232	1,778,109	11,665	2,425,677	
1940 ... ..	657,304	1,171,075	800,862	1,971,927	16,241	2,644,472	
1941 ... ..	664,649	1,247,525	896,118	2,143,643	13,768	2,822,060	
1942 ... ..	674,652	1,314,615	989,653	2,304,268	18,268	2,997,188	
1943 ... ..	678,303	1,340,663	1,124,258	2,464,921	14,037	3,157,261	
1944 ... ..	670,184	1,426,078	1,262,975	2,689,053	7,914	3,367,161	
1945 ... ..	693,687	1,582,241	1,361,772	2,944,013	4,062	3,641,762	
1946 ... ..	667,101	1,537,297	1,446,412	2,983,709	6,084	3,656,894	
Total, 1928 to 1946	10,769,007	19,227,203	11,306,262	30,533,465	249,944	41,542,416	
Payments.							
Net Cost of Securities Repurchased and Redeemed. (Australian Currency.)				Face Value of Securities Repurchased and Redeemed.			
Australia.		London.	New York.	Total.	Australia.	London.	New York.
£		£	£	£	£ stg.		£*
1937 ... ..	874,993	1,180,745	122,688	2,178,426	871,760	1,005,046	100,175
1938 ... ..	468,169	2,096,130	186,472	2,750,761	468,160	1,720,608	151,935
1939 ... ..	1,537,858	793,902	258,960	2,590,720	1,536,150	694,318	206,925
1940 ... ..	1,970,382	56,646	217,028	2,244,056	1,966,170	48,832	173,431
1941 ... ..	541,220		214,905	756,125	541,045		223,364
1942 ... ..	557,127	4,047,167	279,512	4,883,806	554,780	3,228,050	246,378
1943 ... ..	1,567,965	1,747,335	272,706	3,587,996	1,567,980	1,394,125	206,206
1944 ... ..	763,785	1,165,620	288,170	2,217,575	763,770	928,900	194,596
1945 ... ..	2,673,906	2,000,204	161,121	4,835,231	2,673,982	1,595,378	106,853
1946 ... ..	1,729,638	552,686	295,880	2,578,204	1,731,084	441,107	195,726
Total, 1928 to 1946	16,971,778	23,330,448		40,302,226	16,938,707	16,634,082	2,863,454

\* Face value of securities in Dollars converted at \$4·8665 to £1.

The payments shown in the table for repurchases and redemptions of securities are expressed in terms of Australian currency, the exchange on overseas remittances being included in the net cost of securities acquired in London and New York.

The face value of securities repurchased and redeemed corresponds with the value at which the securities were included in the statement of public debt (Tables 228 to 232), as described on page 278. During the eighteen years the sinking fund has been in operation the average price in Australian currency paid for £100 face value of securities repurchased and redeemed was £100 3s. 11d. in Australia, £119 13s. 2d. in London and New York, and £110 12s. 2d. in the three centres. In 1945-46 the average

price per £100 face value was £99 18s. 4d. in Australia, £133 4s. 11d. in London and New York, and the general average was £108 17s. 7d. The balance at credit of the sinking fund as at 30th June, 1946, was £1,240,190. The following table indicates the source of contributions by New South Wales:—

TABLE 239.—National Debt Sinking Fund, Source of Contributions by New South Wales.

Source.	Contributions in respect of year—			Total, 1928 to 1946.
	1943-44.	1944-45.	1945-46.	
	£	£	£	£
Railways ... ..	1,088,000	1,152,000	1,295,000	7,273,569
Tramways and Omnibuses ... ..	46,047	57,000	58,013	718,335
State Coal Mine ... ..	957	2,040	1,716	20,706
Closer Settlement Fund ... ..	77,000	85,000	88,200	1,041,651
Metrop. Water, Sew'ge & Drainage Board	85,500	92,000	95,375	1,465,220
Hunter District Water Board ... ..	21,000	22,400	23,400	323,615
Country Towns Water Supply and Sewerage Works ... ..	3,964	4,060	4,038	164,300
Water and Drainage Trusts ... ..	700	700	500	14,154
Main Roads Department... ..	44,610	51,200	55,450	511,106
Sydney Harbour Bridge ... ..	...	...	...	559,997
Sydney Harbour Services ... ..	82,400	86,400	97,000	1,039,694
Southern Electricity Supply ... ..	11,500	13,500	14,500	131,984
Metropolitan Meat Industry Commissioner	...	...	...	46,114
State Metal Quarries ... ..	...	...	...	2,233
Engineering and Shipbuilding ... ..	...	...	...	534
Public Works—Plant Control ... ..	...	...	295	637
Tourist Bureau ... ..	...	...	...	797
South-West Tablelands Water Supply	3,861	...	...	18,245
Unemployment Relief Fund ... ..	...	...	...	331,273
Consolidated Revenue Fund ... ..	1,223,514	1,377,713	1,250,222	16,869,301
Total ... ..	2,689,053	2,944,013	2,983,709	30,533,465

## PRIVATE FINANCE.

### WARTIME REGULATIONS.

Following the outbreak of war in September, 1939, the Commonwealth, by regulations under the National Security Act, introduced far-reaching economic controls to secure the utilisation of national resources for war-time needs. Since the cessation of hostilities in August, 1945, certain of the controls have been terminated, but others have been retained to facilitate orderly transition from war to peace-time conditions. In some instances measures of control have been embodied in permanent legislation; otherwise authority for the continuance of regulations is contained in the Defence (Transitional Provisions) Act which superseded the National Security Act on its expiry at the end of 1946. Measures for the control of materials, manpower, prices, rationing and organisation of industry are discussed elsewhere in this Year Book. The salient features of regulations directly related to financial controls are described below.

National Security Regulations relating to overseas exchange and monetary control were replaced at the end of 1946 by regulations under the Banking Act, 1945. By the regulations provision is made for the control of transactions in foreign exchange and restrictions have been placed upon the transmission of money (including Australian notes and gold) to places outside Australia. Overseas currency is made available to importers for transactions under import licenses. A system of licensing is applied also to exports to ensure that foreign currency arising from the sale of Australian products overseas is placed at the disposal of the Commonwealth Bank; the Bank pays an equivalent amount in Australian currency to the persons entitled thereto.

All gold held in Australia except gold coin to the value of £25, wrought gold and gold held for commercial use, must be delivered to the Commonwealth Bank. The transfer from Australia of securities in any form and dealings in foreign securities are also subject to control by the Commonwealth Bank.

The Capital Issues Regulations were formulated in October, 1939, to establish control over the issue of capital by companies, borrowing by the issue of securities and mortgages and charges upon property, and the acceptance of deposits. Exemptions from the regulations, which have been amended from time to time, include advances made and deposits accepted by banks, declared pastoral companies, and building societies.

Until December, 1940, consent of the Commonwealth Treasurer was required to the registration of a new company with nominal capital in excess of £2,500 and to the increase by an existing company of nominal, issued or called-up capital by more than £2,500 in any year. Thereafter the registration of new companies and increases in capital by existing companies were in all cases subject to the Treasurer's approval until August, 1945, when restrictions were removed from the registration of new companies with nominal capital up to £10,000 and from increases in nominal, issued or called-up capital to the extent of £10,000 in a year. Under new

regulations issued on 19th December, 1946, the consent of the Treasurer is not required to the registration of new companies nor to increases in nominal capital or the making of calls; it is provided, however, that the consent of the Treasurer must be obtained before a company may issue capital, give a mortgage or charge or accept deposits exceeding £25,000 in the aggregate in a period of two years. No issue of preference capital, or of bonus shares from a revaluation of assets, may be made without the Treasurer's approval.

The maximum amount which a person might borrow by way of mortgage or charge in a year without obtaining the Treasurer's consent was reduced from £5,000 to £2,500 in December, 1941, to £1,500 in January, 1942, £1,000 in April, 1942, and £500 in August, 1942; then it was increased to £1,500 in July, 1945, and to £5,000 in December, 1946.

The Economic Organisation Regulations were designed to prevent speculation in real property and shares and to stabilise values, control interest rates and stabilise rates of wages.

Under the regulations operative since October, 1942, the purchase or acquisition of land is prohibited, except with the consent of the Commonwealth Treasurer. There are certain exemptions from this rule, *e.g.*, the lease of other than country land for a term of three years or less; transactions in which the Commonwealth or a State is a party; acquisitions by gift and sales under a writ of a Court.

From March, 1942, the sale of company shares was permitted only within maximum and minimum price limits approved by the Treasurer, and after they had been registered in the name of the seller for not less than five months. The limits of prices were first fixed at levels 10 per cent. above and below the prices current on 19th February, 1942, and for a time adjustments were made fortnightly where market quotations were at either limit. Because there was steady appreciation in share values, a system of "ceiling" prices was inaugurated in November, 1942 and the maximum and minimum rates were subsequently revised, usually at monthly intervals, within the upper limits thus established. Ceiling prices were fixed in the first place at the levels ruling in September, 1941, par value being taken when the price was at a discount. Apart from a few amendments these remained unchanged until October, 1944, when the ceiling prices of an extensive list of shares were increased on the basis of average prices in the three years preceding the war, with the proviso that no increase should exceed 10 per cent. of the existing ceiling price or 10s. per share, whichever was the less. Further increases on the same basis were sanctioned during 1945 and 1946, and all controls and restrictions imposed by the regulations on the sale of shares were removed as from 1st January, 1947.

The Economic Organisation Regulations authorise the Commonwealth Bank, subject to direction by the Federal Treasurer, to fix maximum interest rates on loans, advances, deposits, hire purchases or instalment purchases, cash orders or other forms of debt. Particulars of rates fixed in terms of the regulations are shown later in this chapter.

Industrial provisions of the Economic Organisation Regulations designed to stabilise rates of wages during the war and for some time thereafter are described in the chapter "Wages" of this Year Book.



The National Security (War-time Banking Control) Regulations, introduced in November, 1941, by which the Commonwealth exercised various controls over the banking system, were repealed in August, 1945, upon the commencement of the Commonwealth Banking Act, 1945, described at page 293. Building operations were controlled by the Commonwealth in terms of National Security Regulations until towards the end of 1945, when this function reverted to the State Governments. Provisions enacted by the State of New South Wales for the control of post-war building activity are described in the chapter "Social Condition" of this Year Book.

### CURRENCY.

Currency matters in Australia are under the supervision of the Commonwealth Government.

#### *Coinage.*

Australian coins are legal tender in Australia as follows, viz., gold for the payment of any amount, silver up to forty shillings, and bronze up to one shilling. Imperial coins also are legal tender for these amounts, except silver coins minted since 31st March, 1920, but few Imperial coins are in circulation in Australia. Australian notes, which have replaced gold coins as units of internal currency, are legal tender for any amount.

Branches of the Royal Mint are in operation in Melbourne (Victoria) and in Perth (Western Australia). The Commonwealth Coinage Act, 1909-1947, empowers the Federal Treasurer to make and issue silver and bronze coins of specified denominations. The denominations of silver coins are two shillings, one shilling, sixpence and threepence, and of bronze coins one penny and one halfpenny. Crown pieces, in value equivalent to five shillings, were issued for the first time in 1937, but are not in general circulation.

The standard fineness of gold coins as fixed by the Coinage Act is  $\frac{11}{12}$  fine gold,  $\frac{1}{12}$ th alloy; thus standard or sovereign gold has a fineness of 22 carats, and the standard weight of a sovereign is 123.27447 grains. For silver coins the standard fineness was fixed at  $\frac{37}{40}$  fine silver,  $\frac{3}{40}$  alloy, until 8th July, 1947, when it was altered to one-half fine silver and one-half alloy. Bronze coins are of mixed metal—copper, tin and zinc, and since 1943 the issue of bronze coins containing copper and zinc only has been permitted under National Security (Supplementary) Regulations.

#### *Paper Currency.*

Prior to 1910, the right to issue paper currency in New South Wales was vested in private banking institutions which had acquired the right by Royal Charter or by special Act of Parliament, and a tax of 2 per cent. per annum was imposed by the State on the bank notes current. In 1910 the Commonwealth Parliament authorised the issue of Australian notes, and to prevent the circulation of other notes, declared notes issued by any of the States not to be legal tender and imposed a tax of 10 per cent. per annum on the notes of the trading banks issued or re-issued after 1st July, 1911. The Commonwealth Bank Act, 1945, prohibits the issue of notes by any person, including a State.

The Australian note issue was controlled by the Commonwealth Treasury until 1920. Then it was transferred to the Note Issue Department of the Commonwealth Bank, under the management of a Board of Directors comprising the Governor of the Bank and three others. Since 1924 the Note Issue Department has been managed by the authority controlling the Commonwealth Bank; viz. a Board of Directors from 1924 to 21st August, 1945, and thereafter the Governor of the Bank assisted by an Advisory Council.

The notes are legal tender and are issued in denominations of 10s., £1, £5, £10, £20, £50, £100, and £1,000. A provision that the notes were to be redeemable in gold coin was withdrawn in 1932.

The money derived from the issue may be invested in gold, on deposit with any bank, or in securities of the Government of the United Kingdom, the Commonwealth or a State. The requirement of a reserve in gold and/or English sterling amounting to not less than 25 per cent. of the notes on issue was abolished as from 21st August, 1945.

The average amount of Australian notes in circulation in New South Wales and elsewhere in each year since 1928-29 is shown in the following table.

TABLE 240.—Australian Note Issue, 1929 to 1946.  
Averages of Weekly Figures.

Year Ended June.	Notes held by—			Year Ended June.	Notes held by—		
	Public.	Banks.	Total.		Public.	Banks.	Total.
	£000	£000	£000		£000	£000	£000
1929 ... ..	25,701	19,100	44,801	1938 ... ..	31,552	17,655	49,207
1930 ... ..	24,517	18,635	43,152	1939 ... ..	32,874	15,738	48,612
1931 ... ..	23,528	23,007	46,535	1940 ... ..	37,924	14,095	52,019
1932 ... ..	25,991	26,050	52,041	1941 ... ..	49,312	14,057	63,369
1933 ... ..	24,991	23,699	48,690	1942 ... ..	67,816	14,644	82,460
1934 ... ..	25,166	21,972	47,138	1943 ... ..	106,299	15,774	122,073
1935 ... ..	26,780	20,568	47,348	1944 ... ..	147,755	15,907	163,662
1936 ... ..	28,184	19,285	47,469	1945 ... ..	176,997	16,732	193,729
1937 ... ..	29,363	18,032	47,395	1946 ... ..	175,391	16,760	192,151

Between June, 1939, and June, 1946, there was an almost sixfold increase in notes held by the public; in the three years ended June, 1944, the amount increased by £120,438,000 to £174,258,000. Coincident with the movement of Allied Forces from Australia notes held by the public decreased by £4,448,000 in 1944-45, but in the next year they increased again by £11,863,000 to £181,673,000.

The following table shows particulars of the note issue as at the last Monday in June of various years since 1939. In May, 1945, it was announced that notes of denomination higher than £10 would cease to be legal tender after 31st August, 1945. Though effect was not given to this decision, many of the larger notes were exchanged for notes of lower denomination.

TABLE 241.—Australian Note Issue, Denomination of Notes, 1939 to 1946.

Denomination.	Last Monday in June.					
	1939.	1941.	1943.	1944.	1945.	1946.
	£000	£000	£000	£000	£000	£000
10s. ...	4,124	4,828	6,589	7,875	8,354	8,083
£1 ...	20,776	28,580	48,732	59,081	74,253	71,715
£5 ...	11,580	19,356	50,949	68,778	72,972	79,154
£10 ...	5,147	9,072	23,319	44,441	27,133	39,416
£20 ...	104	73	57	50	26	9
£50 ...	1,285	2,092	3,443	3,812	1,131	118
£100 ...	2,306	3,184	4,874	5,053	1,494	195
£1,000 ...	2,208	679	393	422	381	274
Held by—						
Public ...	32,701	53,820	123,864	174,258	169,810	181,673
Banks ...	14,829	14,044	14,492	15,254	15,934	17,291
Total ...	47,530	67,864	138,356	189,512	185,744	198,964

A statement of the profits of the Note Issue is shown at page 298, and of the balance sheet at page 297.

## BANKING.

During the war (1939-1945) the Commonwealth Government exercised various controls over the banking system by National Security Regulations, chiefly by regulating the volume of credit and the advance policy of banks, fixing maximum interest rates and controlling dealings in foreign exchange.

Legislation enacted in 1945 gave permanency to powers of regulation of banking, strengthened the Commonwealth Bank in its central banking functions and defined the relationship between the Bank and the Commonwealth Government on questions of financial policy.

The Banking Act, 1945, was brought into force on 21st August, 1945. Under it banking business in Australia may be conducted only by a body corporate possessing the written authority of the Governor-General. Each bank must establish with the Commonwealth Bank a special account consisting of (a) the credit balance as at 28th August, 1945, of a similar account until then maintained under war-time regulations, and (b) such part of subsequent increases in the amount of its total assets in Australia as the Commonwealth Bank may direct. These special accounts may be drawn upon only with the consent of the Commonwealth Bank. Interest is paid on the daily balances of the special accounts at a rate (not exceeding 17s. 6d. per cent. per annum) fixed by the Commonwealth Bank with the Treasurer's approval. The rate actually paid was 15s. per cent. until reduced to 10s. per cent. on 1st February, 1947. When deemed necessary in the public interest the Commonwealth Bank may determine the general advance policy to be followed by the banks, and they may not, except with the prior consent of the Commonwealth Bank, purchase or subscribe to Commonwealth, State or local government securities or securities listed on a Stock Exchange in Australia. Regulations may be issued by the Commonwealth Bank, with the approval of the Treasurer, to control the rates of interest payable to or by the banks or other bodies in the course of banking business. Authority is given to the Commonwealth Bank to requisition upon the foreign currency receipts of

the banks from their Australian business, and the Governor-General may issue regulations to control all dealings in foreign exchange. Provision is made also for the mobilisation of gold in Australia upon the issue of a proclamation by the Governor-General.

Unless otherwise authorised by the Commonwealth Bank, each bank must hold in Australia tangible assets of a value not less than its deposit liabilities. Deposit liabilities are given priority over all other liabilities. The banks must furnish prescribed returns and such other information concerning their business as the Commonwealth Bank directs, but they may not be required to disclose the affairs of an individual customer. The Auditor-General is required to investigate the affairs of each bank periodically and when directed by the Treasurer. If it appears that the position of a bank is insecure the Commonwealth Bank may investigate that bank's affairs and assume control of its business.

State banks are not bound by the provisions of the Banking Act, 1945, other than those relating to the control of gold and foreign exchange. Such bodies as pastoral companies and building societies which transact some banking business, though not engaged in the general business of banking, may be exempt from all or part of the Act.

#### THE COMMONWEALTH BANK OF AUSTRALIA.

The Commonwealth Bank of Australia was constituted under an Act passed by the Federal Parliament in 1911. It commenced savings bank business on 15th July, 1912, and general trading bank business on 20th January, 1913. The Savings Bank Department was separated from the Commonwealth Bank in 1928, but both institutions remained under the one control. Details regarding the Savings Bank are given on page 305.

The Bank was at first placed under the management of a Governor. In 1924 control passed to a Board of Directors comprised of the Governor of the Bank (who was its chief Executive Officer), the Secretary to the Treasury, and six others with experience in agriculture, commerce, finance or industry. On 21st August, 1945, the Board of Directors was dissolved and control of the Bank reverted to the Governor, who is appointed for a maximum term of seven years. To advise the Governor with respect to monetary and banking policy and other matters referred to it, there is an Advisory Council consisting of the Secretary to the Treasury, the Deputy Governor, an additional representative of the Treasury and two officers of the Bank.

The Commonwealth Bank functions as a central bank and controls the note issue (see page 291). It also transacts general banking business and in the Rural Credits, Mortgage Bank and Industrial Finance Departments engages in special forms of lending.

The development of the Bank as a central bank gained impetus from the events of the depression, and the Bank's responsibilities and powers were greatly enlarged as a result of the war. By the Commonwealth Bank Act, 1945, which commenced on 21st August, 1945, it is the general function of the Bank to pursue a monetary and banking policy directed to the greatest advantage of the people of Australia, and to exercise its powers (including those under the Banking Act, 1945) in such manner as will best contribute to the stability of the currency, the maintenance of full employment, and the economic prosperity and welfare of the people of Australia.

The Bank must keep the Treasurer informed as to its monetary and banking policy and, where there is difference of opinion thereon between the Bank and the Government, endeavour to reach agreement with the Treasurer. Failing agreement, the Bank must adopt a policy in accordance with the opinion of the Government upon the Treasurer indicating that the Government accepts responsibility for, and will take such action as it considers necessary by reason of, the adoption of that policy.

The following items taken from weekly balance statements relating to the note issue and central and general banking business illustrates the development of the Commonwealth Bank since 1929.

TABLE 242.—Commonwealth Bank, Note Issue and Central and General Banking Business, 1929 to 1945.

Average of Weekly Figures (Australia and elsewhere).

Period.	Notes Issued.	Special Deposits of Banks.	Other Deposits (including Banks).	Gold and Sterling Reserves, and Short Call in London.	Government and Other Securities.*	Discount and Advances.
Year ended June—	£000	£000	£000	£000	£000	£000
1929† ...	44,801	...	41,873	39,983	34,967	9,994
1931† ...	52,041	...	57,740	22,856	75,207	8,640
1939 ...	48,612	...	86,016	36,260	94,291	15,389
1942 ...	82,460	12,045	123,211	55,212	146,875	25,798
1943 ...	122,072	68,881	159,651	74,110	265,692	23,432
1944 ...	163,642	140,632	176,887	106,281	364,152	22,065
1945 ...	193,729	209,260	199,487	179,861	401,144	23,210
June, (month)—						
1939 ...	47,530	...	83,142	33,394	93,834	16,684
1942 ...	100,914	36,886	125,740	63,734	185,241	27,985
1943 ...	138,356	103,366	178,419	83,776	326,551	21,304
1944 ...	187,637	183,742	189,761	157,865	385,077	26,835
1945 ...	185,494	243,378	196,693	184,740	418,105	20,573

\* Includes Commonwealth Treasury Bills.  
 † Values partly in Sterling until 1936, there-  
 after in Australian currency.

From August, 1945, the general and central banking activities of the Bank were separated.

The following averages of weekly figures during 1945-46 relate only to the note issue and central banking business and, therefore, are not comparable with figures in the foregoing table:—

	September, 1945.	December, 1945.	March, 1946.	June, 1946.	September, 1946.
	£ million.				
Notes Issued ...	185.6	196.5	195.3	197.7	197.8
Deposits of Trading Banks—					
Special Accounts ...	221.2	231.9	251.0	260.6	253.3
Other ...	26.5	28.8	30.3	21.6	24.1
Other Liabilities (excluding Capital and Reserves) ...	144.9	142.4	151.6	147.2	129.9
Gold and Balances abroad...	158.6	173.9	190.6	201.8	215.0
Government and Other Securities... (including Treasury Bills) ...	416.8	421.7	424.5	418.0	389.9

The Commonwealth Bank Act, 1945, makes it the duty of the Bank to develop and expand its general banking business. It also authorises the General Banking Division to make loans, at the lowest practicable rate of interest, to individuals and building societies for the erection or purchase of homes or for the discharge of mortgages on homes. Loans to individuals are restricted to homes in which the borrower intends to reside; they are on *credit foncier* terms, secured by first mortgage on land and, subject to a maximum of £1,250, may be granted up to 85 per cent. of valuation for periods not less than five nor more than thirty-five years. Operations under this scheme commenced on 2nd January, 1946. A loan to a building society may not exceed 90 per cent. of the value of the property on which the building society makes an advance.

The Rural Credits Department was formed in 1925 to assist the marketing of products of the rural industries. The department may make seasonal advances upon the security of primary produce to co-operative associations, marketing boards, and such other bodies as may be specified by proclamation. In lieu of making advances the department may discount bills secured upon primary produce on behalf of any of these institutions.

The Mortgage Bank Department was established in September, 1943. It makes long-term loans to primary producers upon the security of a first mortgage of land used for primary production. The money lent may be used only in connection with the borrower's business of primary production or to discharge a prior encumbrance on land used for such purpose. Subject to a maximum of £5,000, loans may be granted up to 70 per cent. of the Bank's valuation of security for periods not less than five nor more than forty-one years. Borrowers are required to pay equal half-yearly instalments on account of principal and interest and such instalments may not be less than an amount calculated on the original loan at a rate 1 per cent. per annum above the rate of interest chargeable, shown on page 314.

The Industrial Finance Department was opened on 2nd January, 1946, to provide finance for the establishment and development of industrial undertakings, particularly small undertakings, and to provide advice to promote the efficient organisation and conduct of undertakings. Financial accommodation is given by way of overdraft, fixed loan and hire purchase.

### *Capital.*

The aggregate capital of the Commonwealth Bank amounted to £14,067,145, and general reserves totalled £1,200,722, at 30th June, 1946. From a special reserve—premium on gold sold—of the Note Issue Department transfers of £1,000,000 each have been made to the Mortgage Bank and Industrial Finance Departments; of the balance of the account amounting to £5,754,954 at 30th June, 1946, a further £1,000,000 is to be paid to the Industrial Finance Department and the remainder is to be held for the purpose of preserving the external value of the currency and for purposes of the Note Issue Department.

The capital accounts of the separate departments at 30th June, 1946, were as follow:—Central Banking, £4,000,000, and General Banking, £4,000,000, derived wholly from banking profits; Rural Credits £2,000,000, obtained from profits of the Note Issue between 1925 and 1932; Mortgage Bank, £2,067,145, comprising transfers from the Note Issue special reserve (profit on gold sold), £1,000,000, and from the profits since 1943-44 of

the Note Issue and banking business, £414,144 and £653,001, respectively; Industrial Finance, £2,000,000, comprising £1,000,000 from the Note Issue special reserve and £1,000,000 from other funds of the Bank. The capital accounts of the Mortgage Bank and Industrial Finance Departments each are to be increased to £4,000,000, the former by annual appropriations from the Note Issue Department and Central Banking business, the latter by further transfers of £1,000,000 from the Note Issue special reserve and £1,000,000 from other funds of the Bank.

In addition to the capitals stated and reserve accretions, funds may be obtained by way of advances from the following sources, viz., for the purposes of the Rural Credits Department, from the Treasurer and Commonwealth Bank; for the Mortgage Bank Department, from the Commonwealth Bank and Commonwealth Savings Bank; and for the Industrial Finance Department, from the Treasurer, Commonwealth Bank and Commonwealth Savings Bank. The balance outstanding in respect of advances from the Treasurer to the Rural Credits Department may not exceed £3,000,000 at any time and advances by the Commonwealth Bank to either the Mortgage Bank Department or the Industrial Finance Department are limited to £1,000,000.

The following statement shows particulars as at 30th June, 1946, of the balance-sheets of the several departments of the Commonwealth Bank, together with an aggregate balance-sheet from which inter-departmental accounts totalling £4,447,000 have been excluded.

TABLE 243.—Commonwealth Bank, Balance-sheet at 30th June, 1946.

Particulars.	Central Bank.	Note Issue.	General Bank.	Rural Credits.	Mortgage Bank.	Industrial Finance.	Aggregate
Liabilities.							
Capital ... ..	£000	£000	£000	£000	£000	£000	£000
Reserves ... ..	4,000	...	4,000	2,000	2,067	2,000	14,067
„ —Profit on Gold	537	...	167	462	29	6	1,201
Notes on Issue	...	5,755	...	...	...	...	5,755
Deposits, Bills, etc., (incl. provisions)	...	198,930	...	...	...	...	198,930
	439,494*	1,975	71,303	817	367	85	509,594
Total ... ..	444,031	206,660	75,470	3,279	2,463	2,091	729,547
Assets.							
Gold, Balances Abroad...	£000	£000	£000	£000	£000	£000	£000
Australian Notes, Cash	155,635	50,880	2,576	...	...	...	209,091
Cheques, etc., of Banks...	3,793	...	4,276	1,021	...	106	8,069
Securities—	10,234	...	331	...	...	...	10,565
Commonwealth†	254,209	155,702	37,900	1,804	...	1,150	450,765
Other Govt., Local	6,362	...	...	...	...	...	6,362
Bills, Remit' in Transit	1,566	...	10,870	...	...	...	12,436
Premises	238	...	454	...	...	...	692
Loans, Advances, etc.	11,994	78	19,063	454	2,463	835	31,567
Total ... ..	444,031	206,660	75,470	3,279	2,463	2,091	729,547

\* Includes Special Accounts of Trading Banks, £260,112,000, Other Deposits of Trading Banks £17,677,000, and Other Deposits and Provisions for Contingencies, £160,252,000.

† Includes Commonwealth Treasury Bills.

\* 71461—3

*Profits.*

In terms of the Commonwealth Bank Act, 1945, of the annual profits of the Note Issue Department £150,000 is payable to the capital account of the Mortgage Bank Department until its capital reaches £4,000,000 and the remainder is payable to the Commonwealth Treasury. Profits from the Central Banking business are allocated as to one-half to the National Debt Sinking Fund, one-quarter to the Mortgage Bank capital account until it reaches £4,000,000 and the remainder to reserve account. Profits of the General Banking Division are shared equally between the reserve account and the National Debt Sinking Fund. Those of the Rural Credits Department are divided equally between reserves and the development fund used for the promotion of primary production. The whole of the profits of the Mortgage Bank and Industrial Finance Departments are credited to the respective reserve accounts.

The following statement shows the net profits earned in 1938-39 and each of the last five years and the manner in which they were distributed. For convenience, the profits of the Commonwealth Savings Bank are included in the statement; as a result of amalgamations with State Savings Banks, part of such profits is payable to State authorities and the balance is divided equally between the reserve account and the National Debt Sinking Fund.

TABLE 244.—Commonwealth Bank and Savings Bank, Net Profits, 1939 to 1946.

Department, etc.	Year ended 30th June—					
	1939.	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£	£
<i>Profits.</i>						
Note Issue... ..	766,731	1,658,140	2,247,702	2,743,115	3,098,472	3,089,405
Central Banking ... ..	350,579	526,907	873,135	985,104	956,596	670,304
General Bank ... ..	31,580	47,385	44,281	37,827	36,807	32,864
Rural Credits ... ..						
Mortgage Bank ... ..	...	...	...	(-) 13,186	16,452	25,341
Industrial Finance ... ..	...	...	...	...	...	6,285
Savings Bank ... ..	532,736	609,286	653,341	848,934	1,403,029	1,511,858
Total ... ..	1,687,626	2,841,718	3,818,459	4,601,794	5,511,356	5,670,212
<i>Distribution of Profits.</i>						
Capital and Reserves ... ..	352,221	471,522	655,006	861,815	1,064,240	1,135,741
Commonwealth Treasury ... ..	766,730	1,658,141	2,247,702	2,628,971	2,948,472	2,939,405
National Debt Sinking Fund ... ..	336,431	447,831	632,868	741,943	879,385	937,684
Rural Credits — Development Fund ... ..	15,790	23,692	22,141	18,913	18,404	16,432
State Authorities ... ..	216,454	240,532	260,742	350,152	600,855	640,950
Total ... ..	1,687,626	2,841,718	3,818,459	4,601,794	5,511,356	5,670,212

(-) Net loss.

### TRADING BANKS.

There were eighteen trading banks operating in Australia in June, 1946, fourteen of them authorised private banks in terms of the Banking Act, 1945, and four of them Government institutions. Of these, twelve authorised private banks and two Government banks conducted business in New South Wales.

The number of branches and amount of deposits and advances of each bank in New South Wales and Australia in June, 1946, are shown on page 299. Large sums held by the banks in the form of cash balances, special



deposits with the Commonwealth Bank and investments in Government securities are omitted from this statement but the totals for all banks are shown in later tables.

TABLE 245.—Trading Banks, Branches, Deposits and Advances, June, 1946.

Bank.	In New South Wales.			In Australia.		
	Branches. *	Deposits.	Loans and Advances.	Branches. *	Deposits.	Loans and Advances.
	No.	£ million.		No.	£ million.	
Bank of N.S.W. ...	261	101.99	37.79	502	174.24	62.68
Commercial of Sydney ...	193	54.56	21.39	309	86.50	30.41
Commercial of Australia ...	60	13.21	5.18	284	65.67	22.41
National of Australasia ...	33	11.22	4.45	286	81.65	28.78
Queensland National ...	5	1.38	.66	87	21.28	8.81
Bank of Adelaide ...	1	.70	.19	59	12.76	5.11
Bank of Australasia ...	57	19.86	8.64	168	60.26	24.00
English, Scottish and Aus- tralian ...	54	18.29	4.77	201	71.28	20.68
Union of Australia ...	56	16.01	7.53	167	53.46	21.46
Nine Banks ...	720	237.22	90.60	2,063	627.10	224.34
Commonwealth† ...	207	32.22	7.61	316	57.98	18.32
Rural Bank of N.S.W.† ...	57	5.86	12.87	57	5.86	12.87
Bank of New Zealand ...	1	1.40	.44	2	2.13	.50
Comptoir National ...	1	1.01	.09	2	1.11	.19
Bank of China ...	1	.04	...	1	.04	...
In N.S.W. (14) ...	987	277.75	111.61	2,441	694.22	256.22
State Bank (South Australia)† ...	...	...	...	18	1.82	1.58
Rural (Western Australia)† ...	...	...	...	17	...	...
Ballarat Banking Co. ...	...	...	...	2	.44	.45
Brisbane P.B. & Banking Co. ...	...	...	...	1	2.05	1.22
	987	277.75	111.61	2,479	698.53	259.47

\* Excludes agencies numbering 172 in New South Wales and 701 in Australia.

† Government Banks. Particulars relate to general banking business only.

The group of nine private trading banks appearing first in the table transacts most of the trading bank business; they held 85 per cent. of the total deposits in New South Wales and 90 per cent. of the Australian total. The Commonwealth Bank (General Banking Division) held 12 per cent. and 8 per cent. of deposits respectively.

Of the nine private trading banks two were incorporated in this State, two in Victoria, and one each in Queensland and South Australia and three in England. Six of the banks have branches in all the Australian States, and the remaining three have branches in three, four and five States, respectively. Four of the banks operate in New Zealand, but by far the greater proportion of their business is transacted in Australia.

The following table shows in respect of the nine private trading banks the average amount of deposits and principal assets in Australia in various years since 1929, and in the month of June of certain years since 1939. Also shown are figures for June, 1946, in respect of the Commonwealth Bank (General Banking Division) and all trading banks as listed in Table 245; comparable figures relating to the General Banking Division of the Commonwealth Bank are not available for earlier years.

TABLE 246.—Trading Banks, Deposits and Principal Assets in Australia.

## Average of Weekly Figures.

Period.	Deposits.			Cash Items.	Common-wealth Treasury Bills.	Special Accounts with Commonwealth Bank.	Government and Municipal Securities.	Advances, Discounts, etc.
	Not Bearing Interest.	Bearing Interest.	Total Deposits.					
Nine Trading Banks.								
Year ended June—	£000	£000	£000	£000	£000	£000	£000	£000
1929 ... ..	107,196	170,984	278,180	51,064	...	...	16,644	237,620
1932 ... ..	85,661	184,122	269,783	47,517	23,037	...	9,472	231,011
1936 ... ..	108,411	179,520	287,931	33,045	24,192	...	18,279	258,282
1939 ... ..	118,868	198,792	317,660	33,597	21,533	...	20,477	288,109
1940 ... ..	130,028	205,235	335,263	37,932	31,329	...	30,165	288,434
1941 ... ..	152,372	206,129	358,501	41,163	39,937	...	52,903	282,426
1942 ... ..	178,438	199,827	378,265	41,416	42,267	16,848	59,640	273,729
1943 ... ..	233,299	193,358	426,657	43,322	59,443	68,420	62,906	248,719
1944 ... ..	290,988	211,703	502,691	40,908	63,826	139,965	79,960	232,421
1945 ... ..	343,773	224,023	567,796	38,038	60,283	207,992	105,842	208,719
1946 ... ..	385,952	220,415	606,367	38,462	59,782	238,098	115,272	212,178
Month (June)—								
1939 ... ..	117,122	200,897	318,019	28,598	23,870	...	22,099	291,716
1942 ... ..	195,867	191,937	387,854	40,439	39,630	36,397	56,272	268,294
1943 ... ..	256,128	197,329	453,457	33,418	50,813	102,917	75,715	245,955
1944 ... ..	314,604	219,861	534,465	38,017	55,425	182,838	89,052	227,789
1945 ... ..	358,468	224,062	582,530	36,488	46,480	241,770	104,334	207,895
1946 ... ..	413,953	213,149	627,102	32,276	40,049	258,469	122,698	224,341
Commonwealth Bank (General Banking Division).								
1946 ... ..	38,615	19,365	57,980	5,032	3,875	...	35,400	18,323
All Trading Banks.								
1946 ... ..	460,914	237,618	698,532	38,896	44,602	260,612	166,991	259,471

Deposits not bearing interest are on current account and may be withdrawn on demand. Further deposits on current account are included under "interest bearing"; e.g., nine banks £15,043,000 and all trading banks £19,458,000 in June, 1946. The balance of the interest bearing deposits represents amounts deposited for fixed terms—usually three, six, twelve or twenty-four months. Government balances held on deposit with the trading banks amounted to £12,357,000 (viz., non-interest bearing £3,764,000 and interest bearing £8,593,000) in June, 1946, including £9,658,000 with the nine banks.

Cash items of the nine banks in June, 1946, comprised gold coin, £65,000; other coin, £2,142,000; Australian Notes, £10,825,000; and balances (other than Special Accounts) with the Commonwealth Bank, £19,244,000.

Treasury Bills are usually of three months' currency and may be rediscounted at the Commonwealth Bank.

The Special Accounts with the Commonwealth Bank represent accretions to the funds of the trading banks which they have been required to place on deposit with the Central Bank. They are used as a means of control over bank credit, and may be drawn upon only with the consent of the Commonwealth Bank.

Advances, discounts, etc., are comprised mainly of overdrafts repayable on demand.

Deposits in the nine trading banks increased by £69,835,000 to £387,854,000 in the three years from June, 1939 to 1942, and then rose rapidly as a result of war expenditures by £239,248,000 in the next four years to £627,102,000 in June, 1946. The total increase from June, 1939, amounted to £309,083,000 or 97 per cent. Of this increase £296,831,000 was in the form of non-interest bearing deposits and only £12,252,000 in interest bearing deposits, and the ratio of non-interest bearing to total deposits in June rose from 37 per cent. in 1939 to 66 per cent. in 1946.

Advances by the nine banks in June decreased by £83,821,000 or 29 per cent. between 1939 and 1945 but, with the termination of hostilities, increased by £16,446,000 in the year ended June, 1946.

The following table shows, in respect of the nine private trading banks, the ratio of non-interest bearing deposits and of the various classes of assets to total deposits in Australia in various years since 1929.

TABLE 247.—Nine Private Trading Banks, Ratios in Australia.  
Average of Weekly Figures.

Year ended June.	Ratio to Total Deposits.					
	Deposits not Bearing Interest.	Cash and Investments in Australia.				
		Cash Items.	Treasury Bills.	Special Accounts with Common- wealth Bank.	Government and Municipal Securities.	Advances, etc.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1929 ... ..	38·5	18·4	...	...	6·0	85·4
1932 ... ..	31·7	17·6	8·5	...	3·5	85·6
1939 ... ..	37·4	10·6	6·8	...	6·4	90·7
1942 ... ..	47·2	10·9	11·2	4·4	15·8	72·4
1943 ... ..	54·7	10·1	13·9	16·0	14·7	58·3
1944 ... ..	57·9	8·1	12·7	27·8	15·9	46·2
1945 ... ..	60·5	6·7	10·6	36·6	18·6	36·8
1946 ... ..	63·6	6·3	9·9	39·3	19·0	35·0

*Trading Bank Deposits and Advances in New South Wales.*

Particulars of the deposits and advances in New South Wales of the trading banks listed in Table 245 are shown below for various years since 1928-29. The business of the banks is conducted on an Australia-wide basis and little significance attaches to the cash balances, Government securities, etc., held by the banks in any one State; hence such figures have been omitted from the table.

TABLE 248.—Trading Banks, Deposits and Advances in N.S.W.  
Average of Weekly Figures.

Period.	Deposits.					Advances.
	Not Bearing Intefest.		Bearing Interest.		Total Deposits.	
	Government.	Other.	Government.	Other.		
Year ended June,	£000	£000	£000	£000	£000	£000
1929 ... ..	819	43,711	4,843	60,540	112,913	95,834
1932 ... ..	483	35,083	553	58,041	94,443	92,226
1936 ... ..	412	44,100	409	55,495	100,416	100,148
1939 ... ..	319	49,384	1,273	63,199	114,175	119,266
1940 ... ..	248	55,997	2,018	64,872	123,135	118,930
1942 ... ..	346	77,005	2,433	63,825	143,659	110,459
1943 ... ..	393	93,912	2,403	61,991	158,699	99,083
1944 ... ..	485	115,966	2,771	69,808	189,030	88,309
1945 ... ..	462	137,478	2,146	76,013	216,099	83,309
1946 ... ..	594	150,917	1,664	75,906	229,081	86,089
Month of June,						
1946 ... ..	662	162,410	1,425	72,722	237,219	90,600
Commonwealth Bank (General Banking Division).						
1946 ... ..	518	21,825	76	9,804	32,223	7,613
All Trading Banks.						
1946 ... ..	1,638	189,779	1,501	84,832	277,750	111,616

#### THE RURAL BANK OF NEW SOUTH WALES.

Particulars of the foundation and changes in the constitution of the Rural Bank of New South Wales were stated on page 709 of the 1930-31 and page 442 of the 1931-32 editions of the Year Book.

Prior to 1st July, 1933, the bank functioned under the name of the Government Savings Bank of New South Wales, although the Savings Bank Department ceased active business on its amalgamation with the Commonwealth Savings Bank of Australia as from 15th December, 1931. The agreements under which the amalgamation was effected provided for the transfer of deposits in the Rural Bank Department to the Commonwealth Bank of Australia.

The business of the Rural Bank is conducted in three departments, viz., the Rural Bank Department, Advances for Homes Department, and (since July, 1944) the Personal Loans Department, and the Bank administers in a Government Agency Department various lending activities on behalf of the Government. Control of the Bank is exercised by three commissioners, of whom one is president, appointed during ability and good behaviour until age sixty-five years.

#### *Rural Bank Department.*

An account of the origin and operations of the Rural Bank Department is given in the chapter "Rural Industries" of this Year Book.

Prior to 1931 the Department obtained the bulk of its funds from customers' deposits, loans from the Savings Bank Department, and a public issue of approximately £1,000,000 made in 1923. On 15th December, 1931,

Rural Bank stock was issued to the Commonwealth Bank as consideration for the assumption of deposit liabilities by this institution, and to the Commonwealth Savings Bank in place of loans due previously to the Savings Bank Department. As from this date the Rural Bank Department functioned only in so far as loan accounts were concerned until 28th November, 1933, when deposit business was resumed. At 30th June, 1946, there were 57 branches in Sydney and important country centres; in other places the Commonwealth Bank acts as agent.

The balance-sheet of the Rural Bank Department as at 30th June, 1946, was as follows:—

TABLE 249.—Rural Bank of New South Wales, Rural Bank Department Balance-sheet.

<i>Liabilities.</i>		<i>Assets.</i>	
	£		£
Stock and Debentures Issued	11,965,325	Cash and Bank Balances ...	959,215
Reserve Fund ... ..	1,074,780	Cheques, etc., and balance	
Special Reserve ... ..	2,554,794	with and due by other	
Deposits, Other Liabilities		Banks ... ..	611,875
and Reserves for Contingencies ... ..	7,015,735	Treasury Bills ... ..	399,804
Government Agency Dept.		Investments in Securities—	
Capital Accounts ... ..	180,282	Commonwealth Government	6,116,661
		Local and Semi-Government	425,685
		Loans and Advances ...	13,295,960
		Sundry Debtors ... ..	151,871
		Stock—Personal Loans Dept.	168,600
		Bank Premises ... ..	661,245
Total ... ..	22,790,916	Total ... ..	22,790,916

The net profit amounting to £40,831 in 1944-45 and £41,882 in 1945-46 was transferred to the reserve fund.

In terms of the agreement under which the savings business of the Bank was amalgamated with the Commonwealth Savings Bank, one-half of the profits earned in New South Wales by the Commonwealth Savings Bank is payable to the Commissioners of the Rural Bank. Amounts received in this manner are credited direct to a special reserve account of the Rural Bank Department, which, at 30th June, 1946, amounted to £2,554,794. The share of the profits was £226,020 in 1944-45 and £383,675 in 1945-46.

#### *Advances for Homes Department.*

An account of the operations of the Advances for Homes Department is published in the chapter "Social Condition" of this Year Book.

Funds for the purposes of the Department were obtained mainly by loan from the Savings Bank Department, but liability in this respect is now owing to the Commonwealth Savings Bank. A sum of nearly £1,000,000 was obtained from the Housing Fund constituted by the Commonwealth Government, and a loan of £1,511,780 was raised by public subscription in 1934 to provide for the redemption of a £1,000,000 loan floated in 1924, and to enable lending operations to be resumed. Further loans have since been arranged with the Commonwealth Savings Bank.

The balance-sheet of the Advances for Homes Department at 30th June, 1946, was as follows:—

TABLE 250.—Rural Bank of New South Wales, Advances for Homes Department Balance-sheet.

<i>Liabilities.</i>				<i>Assets.</i>			
			£				£
Stock and Debentures				Cash at Bankers ... ..			44,889
Issued ... ..			9,978,327	Commonwealth Government			
Reserve Fund ... ..			1,100,544	Securities ... ..			4,021,999
Deposits, other Liabilities and				Metropolitan Water Board			
Reserves for Contingencies			1,592,195	Securities ... ..			154,338
Amounts due to Other				Fixed Deposits with other			
Departments ... ..			9,559	Banks ... ..			70,214
				Rural Bank Depart. Stock...			385,000
				Other Assets ... ..			7,446
				Loans on Mortgage and Con-			
				tracts of Sale ... ..			7,996,739
Total ... ..			12,680,625	Total ... ..			12,680,625

The net profit amounted to £41,021 in 1944-45 and £32,265 in 1945-46, which was transferred to the reserve fund.

#### *Personal Loans Department.*

The Personal Loans Department was created on 1st July, 1944, to provide facilities for small loans on terms and conditions more reasonable than are generally obtained by persons requiring them. Loans are made usually for sums ranging from £10 to £100, but may exceed this limit. Interest is charged at a discount rate and deducted from the amount of the loan. The rate was 5 per cent. per annum until October, 1945, when it was increased to 6 per cent.

Funds for the purposes of the Department have been obtained by the issue to the Rural Bank Department of stock amounting to £168,600 at 30th June, 1946. Advances totalling £126,041 in 1944-45 and £216,908 in 1945-46 were made to 2,573 and 3,597 persons in the respective years, and at 30th June, 1946, the total balance owing by 4,036 persons was £156,767. Operations in the first two years resulted in a net loss; viz., £3,629 in 1944-45 and £1,416 in 1945-46.

#### *Government Agency Department.*

A Government Agency Department was established under the Rural Bank Act, 1932, with the object of co-ordinating under the control of a central authority certain lending activities conducted formerly through Government Departments. The scope of the Department's functions and powers is defined by the Rural Bank (Agency) Act, 1934, as amended. In terms of this Act various agencies were created.

In respect of each agency the Rural Bank acts in an administrative capacity as agent for the Government, collecting charges and principal sums owing and making new advances in accordance with Government policy. In four agencies concerned with building and housing the Bank ceased to make new advances as from 31st October, 1942, when this function was

transferred to the Housing Commission. The cost of administering the agencies is payable to the Bank from Consolidated Revenue Fund and revenue earnings are payable to the State Treasurer. Collections on account of principal sums due by borrowers (except for building and housing), may be retained by the Department for the purpose of making further advances.

The financial operations of the various agencies during the year ended 30th June, 1946, are summarised in the following table. Further particulars of the loans for building purposes and the housing of soldier's families are shown in the chapter "Social Condition" of this Year Book, and details regarding finance for rural industries in the chapters "Rural Industries" and "Land Legislation and Settlement".

TABLE 251.—Rural Bank of New South Wales, Government Agency Department, 1945-46.

Agency.	Revenue Collec- tions.	Adminis- trative Expenses.	Particulars of Advances.		
			Made during Year.	Repaid during Year.	Outstanding at 30th June.
	£	£	£	£	£
Building Relief ...	2,885	2,650	111	24,768	71,035
Government Housing ...	9,794	1,240	402	26,128	193,387
Home Building Scheme ...	1,343	3,026	...	12,603	22,311
Soldiers Families Housing ...	261	74	91	828	5,490
Advances to Settlers ...	14,400	11,670	32,001	90,550	429,879
Rural Reconstruction ...	66,702	73,805	868,160	352,676	4,237,098
Government Guarantee ...	...	161	32,425	...	13,822
Irrigation ...	313,233	25,832	119,649	115,023	1,575,049
Rural Industries ...	14,763	25,306	156,783	162,825	1,077,797
Closer Settlement ...	7,045	398	...	2,080	162,471
Total 1945-46 ...	430,426	144,162	1,209,622	787,481	7,788,339
„ 1944-45 ...	402,928	148,821	1,113,517	668,588	7,664,869
„ 1943-44 ...	449,258	148,014	753,845	871,692	7,337,656

Amounts advanced and repaid during the year represent capital sums only, but balances outstanding at 30th June include amounts due for interest and other charges as well as capital.

It is not possible from the figures in the table to calculate the net profit or loss of the various agencies, as no charge is made for interest on capital resources used in making loans and advances.

#### SAVINGS BANKS.

Savings bank business is conducted in all Australian States by the Commonwealth Savings Bank, also by State savings banks in Victoria and South Australia and by two trustee savings banks in Tasmania.

The Commonwealth Savings Bank opened as a separate department of the Commonwealth Bank in Victoria on 15th July, 1912, and in the other States within six months; operations commenced in New South Wales on 13th January, 1913. It was established as a separate institution—the Commonwealth Savings Bank of Australia—on 9th June, 1928, but remained under the control of the Board of Directors of the Commonwealth Bank until the Board was abolished as from 21st August, 1945. The control then reverted to the Governor of the Commonwealth Bank.

The savings bank funds are available for long-term investments, *e.g.*, public securities, loans on the security of land, advances for warehouses and stores for primary products, advances to the Mortgage Bank and Industrial Finance Departments of the Commonwealth Bank and deposit with the Commonwealth Bank.

Particulars of the deposits in Australia and total assets in Australia and elsewhere of the Commonwealth Savings Bank and all savings banks are shown below in respect of 1939 and the last five years.

TABLE 252.—Savings Banks, Deposits in Australia and Total Assets.

At 30th June.	Deposits in Australia.	Total Assets.					
		Cash and Money at Short Call.	Common- wealth Securities.	Other Government Securities.	Other.	Total.	
£ million.							
Commonwealth Savings Bank.							
1939	...	146.1	11.4	108.4	32.7	4.2	156.7
1942	...	164.3	17.9	122.0	32.1	4.0	176.0
1943	...	220.6	44.5	154.0	30.6	4.3	233.4
1944	...	299.3	40.7	233.8	33.7	5.0	313.2
1945	...	366.4	40.6	304.7	32.0	4.9	382.2
1946	...	434.0	43.3	373.0	30.7	4.9	451.9
All Savings Banks.							
1939	...	245.6	42.2	207.8		15.7	265.7
1942	...	274.3	53.5	228.9		15.2	297.6
1943	...	358.0	90.5	277.8		15.0	383.3
1944	...	471.5	101.2	328.8	53.3	15.3	498.6
1945	...	567.0	110.2	420.6	51.3	14.7	596.8
1946	...	663.6	102.9	529.5	48.5	15.1	696.0

#### *Savings Banks in New South Wales.*

Savings bank business in New South Wales has been conducted solely by the Commonwealth Savings Bank since the savings bank business of the Government Savings Bank of New South Wales was merged with that institution on 15th December, 1931. At 30th June, 1946, savings bank business was transacted at 212 branches of the Bank and at numerous post offices and other agencies in New South Wales. Deposits are received in sums of one shilling or more, and interest is allowed on the minimum monthly balance at the rate of 2 per cent. per annum up to £500, and at 1 per cent. on an additional amount up to £1,000 on personal accounts, and at the rate of 2 per cent. per annum up to £2,000 and 1 per cent. on the excess of accounts of bodies not operating for profit, such as friendly societies. Changes in the rates of interest are shown in Table 265.

The following statement shows the operations on savings bank accounts and the amount of depositors' balances in New South Wales in various years.



TABLE 253.—Savings Bank Deposits in New South Wales.

Year ended 30th June.	Savings Bank Deposits.					
	Amounts Credited.		Withdrawals. *	Increase in Depositors' Balances.	Deposits at 30th June.	
	Deposits.*	Interest.			Amount.	Per Head.
	£	£	£	£	£	£ s. d.
1920 ...	54,660,882	1,597,050	53,394,739	2,862,745	49,951,362	24 3 0
1929 ...	81,941,134	3,051,191	80,847,878	4,099,847	85,727,514	34 5 1
1931 ...	58,179,625	2,799,637	73,652,380	(—) 12,054,661	69,810,769	27 6 6
1939 ...	66,576,777	1,609,757	67,154,749	1,458,104	87,473,789	31 10 11
1940 ...	64,125,646	1,604,057	71,339,989	(—) 5,362,889	82,110,900	29 12 7
1941 ...	66,567,655	1,577,770	62,754,320	5,639,308	87,750,208	31 9 3
1942 ...	81,633,010	1,539,529	76,384,815	6,787,724	94,537,932	33 11 5
1943 ...	102,234,510	1,927,348	76,294,244	27,867,614	122,405,546	43 1 8
1944 ...	131,404,836	2,558,376	93,501,460	40,461,752	162,867,298	56 14 7
1945 ...	141,706,128	3,203,212	109,573,592	35,335,748	198,203,046	68 7 4
1946 ...	191,112,181	3,800,574	156,874,265	38,038,490	236,241,536	80 15 0

(—) Decrease in Deposits.

\* Interstate transfers have been included in 1941-42 and later years.

Depositors' balances increased rapidly after 1941 as war industries were developed and business activity and employment expanded. Scarcity of civilian supplies and services contributed, in some measure, to the increase which was favoured also by reductions in the rates of interest paid on fixed deposits in the trading banks and by large sums of deferred pay received by servicemen upon discharge.

On 18th March, 1940, the Federal Government introduced War Savings Certificates as described on page 276. The net sales in New South Wales to 30th June, 1946, are shown below:—

Year.	Net Sales.*		Year.	Net Sales.*	
	In Year.	Accumulated Total.		In Year.	Accumulated Total.
	£	£		£	£
1939-40 ...	2,439,917	2,439,917	1943-44 ...	3,150,898	15,689,549
1940-41 ...	4,040,026	6,479,943	1944-45 ...	3,483,810	19,173,359
1941-42 ...	3,004,632	9,484,575	1945-46 ...	839,200	20,012,559
1942-43 ...	3,054,076	12,538,651			

\* After deducting redemptions.

The number of savings bank accounts in active operation as at 30th June, 1939, and each succeeding year is shown below, together with the average amount of deposit per account.

TABLE 254.—Savings Bank Accounts in New South Wales.

30th June.	No. of Active Accounts.	Average Deposit per Account.	30th June.	No. of Active Accounts.	Average Deposit per Account.
		£ s. d.			£ s. d.
1939 ...	1,330,404	65 15 0	1943 ...	1,535,690	79 14 1
1940 ...	1,312,697	62 11 0	1944 ...	1,702,273	95 13 6
1941 ...	1,339,740	65 10 0	1945 ...	1,797,079	110 5 10
1942 ...	1,378,612	68 11 5	1946 ...	1,910,810	123 12 8

The number of accounts does not represent individual depositors, as many are joint accounts or accounts of societies, trusts, etc., whose members have also personal accounts. It is apparent, however, that an increasingly large proportion of the people practice thrift through the medium of the savings bank.

#### BANKS EXCHANGE SETTLEMENT.

The Banks' Exchange Settlement Office was established in Sydney on the 18th January, 1894. Since 27th April, 1925, exchange balances between the banks have been settled by cheques drawn on and paid into the Commonwealth Bank, and for this purpose the banks have established accounts with the Commonwealth Bank through which settlements are made in full each day. The amount of the cheques drawn on the Commonwealth Bank is included in the exchanges.

The following table shows the growth in the volume of exchanges made through the Settlement Office. The figures represent the aggregate value of cheques drawn on one bank and deposited in another in the metropolitan area and the net balances of transactions at country inter-bank clearings. Abnormal transactions on Government account in respect of Treasury Bills have been excluded since 1930.

TABLE 255.—Inter-bank Clearings, Sydney, 1911 to 1946.

Year.	Amount of Exchanges. *	Year.	Amount of Exchanges. *	Year.	Amount of Exchanges. *
	£000		£000		£000
1911	304,488	1937	937,334	1942	1,248,500
1921	709,735	1938	942,423	1943	1,442,344
1929	1,043,325	1939	932,367	1944	1,499,603
1931	* 683,176	1940	1,074,824	1945	1,512,418
1936	842,610	1941	1,139,354	1946	1,854,273

\* Government Treasury Bill transactions have been excluded from the amounts stated for 1931 and later years.

The figures are affected by amalgamations of banks which took place from time to time between 1916 and 1931.

These exchanges do not include the amount of transactions settled by intra-bank cheques and do not represent the total value of transactions settled by cheque. They are, however, considered an indication of the degree of variation in the volume of business transactions settled by cheque from year to year, provided due allowance is made for changes in price levels and amalgamation of banks.

In compiling the following index of bank clearings, the years 1926 to 1930 (inclusive) are taken as the base period, and the amount of clearings in each month is calculated as a ratio per cent. of the average amount of clearings in the same month in the base years, after adjustment of both sets of figures to remove the effects of special factors. By this means seasonal fluctuations are virtually eliminated. In order to smooth out casual fluctuations the ratio for each month is re-computed as a three months' moving average, so that the index for each month, as published

below, represents the average of the ratios for that month and the two preceding months, with the average for respective months in 1926-1930 as base represented by 100.

TABLE 256.—Index of Bank Clearings, Sydney.

Month.	Average, 1926-1930.	1929.	1932.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.
January ...	100	107	63	98	110	117	123	136	150	152	154
February ...	100	107	62	96	110	114	123	139	147	149	157
March ...	100	106	*	93	107	110	119	138	146	145	164
April ...	100	104	*	98	111	111	125	150	150	154	176
May ...	100	104	*	100	111	117	125	155	158	160	184
June ...	100	104	66	101	115	123	133	163	166	169	195
July ...	100	106	62	98	116	125	130	155	168	167	206
August ...	100	108	64	99	118	123	135	160	169	168	214
September ...	100	107	65	99	117	124	134	155	163	166	217
October...	100	106	66	100	113	123	138	152	159	166	216
November ...	100	103	68	102	114	124	135	149	153	164	211
December ...	100	104	69	106	115	124	136	150	152	159	208
Year ...	100	106	65	100	113	120	131	151	156	160	196

\* Index not ascertainable on account of suspension of State Government banking transactions.

It should be noted that no adjustment has been made for normal growth nor for changes of price levels.

#### MONEY ORDERS AND POSTAL NOTES.

Exchange by means of money orders and postal notes is conducted by the Post Office.

The following table gives particulars of the money orders issued and paid in New South Wales during 1938-39 and the five years ended June, 1946:—

TABLE 257.—Money Order Business in New South Wales.

Year ended 30th June.	Money Orders issued in New South Wales for payment in—				Money Orders issued elsewhere, paid in New South Wales.		
	New South Wales.	Other Australian States.	Other Countries.	Total.	In other Australian States.	Beyond the Common- wealth.	Total.
	£	£	£	£	£	£	£
1939 ...	7,837,252	716,693	180,152	8,734,097	753,010	337,205	1,090,215
1942 ...	9,810,878	785,491	56,051	10,652,420	966,563	121,290	1,087,853
1943 ...	11,678,941	1,079,187	49,250	12,807,378	1,481,044	80,034	1,561,078
1944 ...	12,467,569	1,148,137	56,154	13,671,860	1,836,582	94,909	1,931,491
1945 ...	10,779,830	1,202,014	61,535	12,043,379	1,729,031	126,890	1,855,921
1946 ...	10,892,037	1,268,399	66,386	12,226,822	1,564,011	238,554	1,802,565

The amount of money orders issued in other Australian States and overseas countries for payment in New South Wales usually exceeds the amount sent from this State.

The maximum amount for which a single postal note is issued is £1, and particulars regarding postal notes are shown below:—

TABLE 258.—Postal Note Business in New South Wales.

Year ended 30th June.	Postal Notes issued in New South Wales.	Postal Notes paid in New South Wales.		
		Issued in New South Wales.	Issued in other States.	Total.
	£	£	£	£
1939 ...	3,491,630	2,971,205	306,022	3,277,227
1942 ...	3,721,851	3,269,304	357,322	3,626,626
1943 ...	3,641,680	3,202,280	634,600	3,836,880
1944 ...	3,496,340	3,035,126	941,080	3,976,206
1945 ...	3,515,509	2,997,548	891,949	3,889,497
1946 ...	3,578,707	3,066,251	697,570	3,763,821

The number of postal notes issued in New South Wales was 8,303,190 in 1943-44, 8,337,509 in 1944-45, and 8,482,240 in 1945-46. The number paid in New South Wales was 8,783,131, 8,632,697 and 8,517,640 in the respective years, of which 1,567,875, 1,558,458 and 1,283,915 were issued in other States.

#### INTEREST RATES.

As part of a plan for economic rehabilitation, measures were adopted by Commonwealth and State Governments in 1931 to effect a reduction in rates of interest. By conversion, interest rates on existing internal debts of the Governments were reduced by 22½ per cent. and legislation was enacted to effect, as far as practicable, a corresponding reduction in respect of private indebtedness. The rates payable on debts due to the Crown also were reduced.

During the war period the Commonwealth Government established control over interest rates in terms of National Security Regulations to which reference is made at the beginning of this chapter. By successive orders since 1942, maximum rates of interest have been prescribed for bank overdrafts, fixed deposits and savings bank deposits as shown in Tables 262 to 265; also for certain other loans listed below—

Date of Order.	Loans by Pastoral Co's.	Loans to Local Bodies.		Loans by Building & Co-op. Societies.	Loans to Building Societies Guaranteed by Govt.	Loans by Life Assur- ance Co's. on Own Policies.
		Guaranteed by Gov't.	Other.			
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
March, 1942 ...	5½	3⅝	3⅞	5½	3⅞	5
August, 1944 ...	5½	3½	3⅝	5¼	3⅞	4½
December, 1945 ...	5¼	3½	3⅝	5	3⅞	4¾
January, 1947 ...	5	3½	3⅝	5	3⅞	4½

The maximum rates as fixed applied only to new loans made after the order was issued, with the exception that the rate fixed for loans by pastoral companies was applied also to existing loans if by way of overdraft payable on demand.

*Yield on Government Securities.*

The yield on Government securities sold on the Stock Exchange is an important determinant of interest rates in other spheres. From 15th June, 1940, the Stock Exchanges in Australia fixed minimum prices for the sale of Government securities and prohibited their members from selling at lower than the fixed prices. This control, which had the effect of imposing an upper limit on interest yields on the securities, was repealed on 6th May, 1947. The average yield, including redemption, at current market prices of Commonwealth Government securities maturing in Australia, at the end of June, was 5.52 per cent. in 1928, 5.26 per cent. in 1929 and 6.06 per cent. in 1930. These rates are indicative of the general level of yields prior to the depression. The trend, at appreciably lower levels, following the general conversion of the internal Government debt in 1931, is illustrated by the following statement which shows the annual average yields (i.e., the mean of the yields at or about the end of each month) in the years 1932 to 1941.

TABLE 259.—Average Yields on Commonwealth Securities in Australia, 1932 to 1941.

Year.	Maturing.		Year.	Maturing.		
	5 and under 10 Years.	10 Years and over.		Under 5 Years.	5 and under 10 Years.	10 Years and over.
	per cent.	per cent.		per cent.	per cent.	per cent.
1932	4.57	4.44	1937	3.44	3.75	3.86
1933	3.60	3.75	1938	3.38	3.71	3.76
1934	3.20	3.32	1939	3.84	3.87	3.92
1935	3.51	3.59	1940	3.14	3.25	3.30
1936	3.83	3.89	1941	2.45	2.95	3.10

The yields quoted in the table are weighted averages and relate to Commonwealth securities issued prior to 1st January, 1940. In classifying the securities and calculating yields, securities with optional dates of maturity have been assumed to mature on earliest date when the price is above par and on latest date when the price is below par. Interest on the securities was free of State taxes on income and was exempt from a special Commonwealth tax levied until 1935-36 on income derived from property. It is subject to other Commonwealth taxes on income, but at rates of tax not exceeding those imposed by the Income Tax Act, 1930.

The limitation of Commonwealth income taxation of interest on securities issued prior to 1st January, 1940, does not apply to subsequent issues. Interest on these is taxed at current rates, subject to a rebate of tax under the uniform tax scheme of 2s. in the £. Distinction is made in the following statement between yields on securities with restricted taxation of interest and those with interest taxable at current rates (which have been increased considerably in recent years). The statement shows the yields as estimated by the Commonwealth Bank on securities maturing in 2 years, 7 years and 12 years. The yields are estimated from the rates on securities maturing in respective periods up to 5 years, from 5 to 10 years, and 10 years and over.

TABLE 260.—Yield on Commonwealth Securities in Australia, 1941 to 1946.

Last Wednesday in Month.	Interest subject to Commonwealth Income Tax.			
	At Current Rates.		At Rates not exceeding those in 1930.	
	Short-dated 2 years.	Long-dated 12 years.	Short-dated 2 years.	Medium-dated 7 years.
Average for year :	per cent.	per cent.	per cent.	per cent.
1941 ... ..	2·47	3·23	2·42	2·87
1942 ... ..	2·45	3·24	2·39	2·89
1943 ... ..	2·48	3·23	2·43	2·72
1944 ... ..	2·45	3·24	2·30	2·60
1945 ... ..	2·47	3·25	2·27	2·67
1946 ... ..	1·90	3·24	1·99	2·64
Month :				
1946, July ... ..	1·90	3·24	1·93	2·69
August ... ..	1·88	3·25	1·92	2·52
September ... ..	1·88	3·25	1·94	2·51
October ... ..	1·91	3·25	1·96	2·50
November ... ..	1·92	3·23	1·99	2·56
December ... ..	1·96	3·21	2·01	2·77

*Rate of Discount, Commonwealth Treasury Bills.*

Commonwealth Treasury Bills were first issued in 1927. They are discounted exclusively by the Commonwealth Bank and the trading banks, although in March, 1936, a single issue of small amount was made available for discount by the public.

In 1931 the Commonwealth Bank guaranteed that the bills taken up by the trading banks would be redeemed on maturity, and undertook to re-discount them on demand during currency at the rate of interest at which they were issued. In respect of new issues or re-issues of Treasury Bills after 30th June, 1934, the guarantee of repayment was withdrawn, and re-discounting is undertaken by the Commonwealth Bank at a rate to be fixed at the time of the transaction. Variations in the rates of discount since June, 1927, have been as follows:—

TABLE 261.—Rate of Discount on Commonwealth Treasury Bills, 1927 to 1946.

Month of Change.						Rate of Discount.
						Per cent.
1927—June ... ..	...	...	...	...	...	4
1928—February ... ..	...	...	...	...	...	4½
1929—October ... ..	...	...	...	...	...	5½
1930—October ... ..	...	...	...	...	...	6
1931—July ... ..	...	...	...	...	...	4
1932—November ... ..	...	...	...	...	...	3½
1933—January ... ..	...	...	...	...	...	3½
February ... ..	...	...	...	...	...	2½
June ... ..	...	...	...	...	...	2½
1934—April ... ..	...	...	...	...	...	2½
October ... ..	...	...	...	...	...	2
1935—January ... ..	...	...	...	...	...	1½
1940—May ... ..	...	...	...	...	...	1½
1943—November ... ..	...	...	...	...	...	1½
1945—March* ... ..	...	...	...	...	...	1

\* Rate unchanged, December, 1947.

*Fixed Deposit Rates.*

The trading banks provide a large part of the temporary financial accommodation needed in various business activities. The funds for this purpose are obtained partly as fixed deposits from customers. Variations in the rates of interest paid by trading banks to such customers in New South Wales in recent years are shown below:—

TABLE 262.—Trading Banks, Fixed Deposit Rates, 1920 to 1946.

Month of Change.	Fixed Deposit Rates—Period of Deposit.			
	3 months.	6 months.	12 months.	24 months.
	Per cent.	Per cent.	Per cent.	Per cent.
1920—July ...	3½	4	4½	5
1927—August ...	4	4	4½	5
1930—January ...	4½	4½	5	5½
1931—June ...	3½	3½	4	4½
November ...	3	3½	3½	4
1932—March ...	2½	3	3½	4
May—June ...	2½	3	3½	3½
August ...	2½	2½	3	3½
November ...	2½	2½	3	3½
1933—February ...	2	2½	2½	3
1934—April ...	2	2½	2½	2½
August ...	1½	2½	2½	2½
October ...	1½	2	2½	2½
1936—March ...	2	2½	2½	3
1940—January ...	1½	2½	2½	2½
May ...	1½	2	2½	2½
1941—September ...	1½	1½	2	2½
1942—March* ...	1½	1½	1½	2
1944—January* ...	1	1½	1½	2
August* ...	½	¾	1½	1½
1945—December* ...	½	¾	1	1½†

\* Rates paid were the maximum permitted by order under National Security Regulations.

† Rate on first £10,000 of all 24 months deposits of any one depositor; on excess the rate is 1 per cent.

Alterations in rates apply to deposits lodged or renewed after the date of change and not to deposits accepted at former rates.

*Overdraft and Discount Rates.*

According to information supplied by trading banks, the rates of interest on overdrafts and discounts charged by certain trading banks and dates of changes since 1920 were as follows. The rates are quoted as a range between the minimum and maximum rates charged.

TABLE 263.—Trading Banks, Overdraft and Discount Rates, 1920 to 1946.

Date of Change.	Overdraft Rates.	Rates of Discount on Bills at—	
		Three months.	Over three months.
	Per cent.	Per cent.	Per cent.
1920—July ...	6 to 8	5 to 6	6 to 7
1924—January ...	6 to 8	5½ to 7	5½ to 7
1925—January ...	6 to 8	5½ to 7	6 to 7
1927—August ...	6½ to 8	6 to 7	6½ to 7
1930—March ...	7 to 8½	6½ to 7½	7 to 7½
1931—July ...	5 to 7	5 to 7	5 to 7
1932—July ...	5 to 6	5 to 6	5 to 6
1934—June ...	4½ to 5½	4½ to 5½	4½ to 5½
July ...	4½ to 5	4½ to 5	4½ to 5
1936—April to August ...	4½ to 5½	4½ to 5½	4½ to 5½
October ...	4½ to 5½	4½ to 5½	4½ to 5½
1942—January ...	4½ to 5½	4½ to 5½	4½ to 5½
March ...	4½ to 5	4½ to 5	4½ to 5
1944—August ...	4½ to 4½	4½ to 4½	4½ to 4½
1947—January ...	4½ to 4½	4½ to 4½	4½ to 4½

The maximum rates charged by trading banks since March, 1942, were the highest permitted by orders under National Security Regulations. They apply to overdrafts repayable on demand and to other loans made by trading banks after the date of the order.

Rates of interest charged on various types of advances by the Commonwealth Bank of Australia and the Rural Bank of New South Wales are indicated below, quotations in each instance representing maximum rates charged as at the various dates of change shown. Where a rate is not shown against any month the next preceding quotation was operative.

TABLE 264.—Rates of Interest Charged by Commonwealth Bank and Rural Bank of New South Wales.

Date of Change.	Commonwealth Bank.				Rural Bank of New South Wales		
	Overdrafts.		M'tgage Bank Loans.		Rural Bank Department.		Advances for Homes Department.
	General Bank.	Rural Credits.	To 20 years.	21 to 41 years.	Long Term Loans.	Overdrafts.	
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1930—Jan. ...	*6½	*5½	...	...	6½	6½	*6½
July ...	...	6	...	...	...	...	...
1931—July ...	5½	5	...	...	...	...	...
Oct. ...	...	...	...	...	†	5 <sup>7</sup> / <sub>30</sub>	†
1932—July ...	5	4½	...	...	...	...	...
Dec. ...	...	...	...	...	5	5	5
1933—Jan. ...	4½	4½	...	...	...	...	...
July ...	...	4	...	...	...	...	...
1934—April ...	4½	...	...	...	...	...	...
July ...	...	3¾	...	...	...	4¾	...
Sept. ...	...	...	...	...	...	...	4¾
Oct. ...	...	...	...	...	4¾	...	...
Nov. ...	4½	...	...	...	...	...	...
1935—Jan. ...	...	...	...	...	...	4½	...
April ...	...	...	...	...	4½	...	4½
1937—Jan. ...	...	...	...	...	4¾	4¾	4¾
1940—July ...	...	3½	...	...	...	...	...
1943—Sept. ...	...	...	4	4½	...	...	...
1946—Jan. ...	...	...	...	...	4½	4½	4½

\* Rates prevailing in January, 1930.

† Rates reduced in terms of Interest Reduction Act, 1931.

The rate charged by the General Banking Division of the Commonwealth Bank on overdrafts of local and semi-Governmental authorities has been 4 per cent. since July, 1940, and the rate on advances by the Rural Credits Department carrying a Government guarantee was reduced to 3½ per cent. on 1st January, 1947.

The Commonwealth Bank has made loans since 2nd January, 1946, for housing on *crédit foncier* terms at an interest rate of 3¾ per cent., and through the Industrial Finance Department has made advances on overdraft and for fixed terms at 4½ per cent. per annum.

The increased Rural Bank rate of 4¾ per cent. in January, 1937, was charged in respect of overdrafts to the general body of borrowers. For long term advances in both Rural Bank and Advances for Homes Departments the higher rate was charged to new borrowers only, until extended to existing borrowers in April, 1937.



*Savings Bank Deposit Rates.*

Variations since 1928 in the rates of interest paid by the Commonwealth Savings Bank of Australia on the minimum monthly balances at the credit of depositors are shown below:—

TABLE 265.—Rates of Interest on Deposits in Commonwealth Savings Bank.

Month of Change.	Rate of Interest on Balances.			
	Of General Depositors.			Of Societies not Operating for Profit.*
	Under £500.	£500 to £1,000.	£1,000 to £1,500.	
	Per cent.	Per cent.	Per cent.	Per cent.
Prior to October, 1928 ... ..	3½	3½	3	3½
October, 1928 ... ..	4	3½	3	¾
July, 1931 ... ..	3	2½	2	3
July, 1932 ... ..	2¾	2¼	2	2¾
November, 1932 ... ..	2½	2	2	2½
June, 1934 ... ..	2¼	1¾	1¾	2¼
January, 1935 ... ..	2	1¾	1¾	2
April, 1942† ... ..	2	1½	Nil	2
September, 1944† ... ..	2	1¼	Nil	2
December, 1945† ... ..	2	1	Nil	2

\* Whole amount of balance until October, 1944. Rate on balance in excess of £2,000, 1½ per cent. and from December, 1945, 1 per cent.

† Rates fixed in terms of National Security Regulations.

‡ As from July, 1928.

*Mortgage Interest Rates.*

The trend of interest rates charged on loans secured by mortgage since 1935 is indicated in the following table. The rates of interest are the actual (as distinct from the penal) rates recorded in first mortgages registered in the names of mortgagees who were private individuals or private corporations. Where identifiable, renewals and collateral mortgages are omitted, as also are mortgages taken by banks and Governmental agencies.

TABLE 266.—Interest Rates on First Mortgages, 1935 to 1946.

Year.	Weighted Average Rate of Interest on First Mortgages Registered.		Quarter.	Weighted Average Rate of Interest on First Mortgages Registered.	
	Rural Securities.	Urban Securities.		Rural Securities.	Urban Securities.
	Per cent.	Per cent.		Per cent.	Per cent.
1935 ... ..	4·8	5·2	1944—March ...	4·5	5·0
1936 ... ..	4·9	5·2	June ...	4·4	5·0
1937 ... ..	5·0	5·3	September... ..	4·6	5·0
1938 ... ..	5·0	5·4	December ...	4·3	5·0
1939 ... ..	5·2	5·6	1945—March ...	4·4	4·9
1940 ... ..	5·1	5·6	June ...	4·5	4·8
1941 ... ..	4·9	5·5	September... ..	4·4	4·8
1942 ... ..	4·9	5·4	December ...	4·4	4·7
1943 ... ..	4·7	5·0	1946—March ...	4·3	4·7
1944 ... ..	4·4	5·0	June ...	4·3	4·4
1945 ... ..	4·4	4·8	September... ..	4·3	4·4
1946 ... ..	4·3	4·5	December ...	4·4	4·5

Interest on mortgages chargeable by the trading banks is usually stated as being at "prevalent rate," corresponding with the overdraft rates shown in Table 263. Particulars of rates of interest charged by the Rural Bank are shown in Table 264. Advances by the Government of New South Wales, mainly to primary producers, are made usually at lower rates than advances from other sources.

Mortgage interest rates are controlled by Orders made under National Security (Economic Organisation) Regulations.

### *International Currency Reserves.*

The amount of Australia's reserves of international currency at June of each year since 1938, as published by the Commonwealth Bank, is shown below. The figures include the net overseas funds held by the trading banks and Commonwealth Bank and certain balances of the Commonwealth Government. Special war-time factors contributed to the large increases in the balances, such as payments for services rendered for other Governments, remittances on account of Allied Forces in Australia, and the operation of strict exchange and import controls.

TABLE 267.—Australia's International Currency Reserves, Gold and Balances Abroad.

Last Monday in June.				£Amill.	Last Monday in June.				£Amill.
1938	...	...	...	78·4	1943	...	...	...	86·8
1939	...	...	...	55·7	1944	...	...	...	182·5
1940	...	...	...	71·7	1945	...	...	...	208·3
1941	...	...	...	89·5	1946	...	...	...	215·4
1942	...	...	...	69·1					

### *Overseas Exchange Rates.*

After the Great War (1914-1918) Australia returned to a gold standard concurrently with Great Britain on 30th April, 1925. The rate of exchange between the currencies of the two countries then moved to parity and this relationship was maintained until Australia's departure from the gold standard late in 1929. The buying rate for £stg100, telegraphic transfer, rose in steps from £A101 in September, 1929, to £A108 10s. on 9th October, 1930, and to £A130 on 28th January, 1931, from which it was reduced to £A125 on 3rd December, 1931. Since then the rate has not varied.

Changes which have taken place since 1929 in the rates of exchange between Australia and a number of important oversea centres are illustrated below. The rates shown are the mean of buying and selling rates for telegraphic transfers quoted by the Commonwealth Bank or, if these were not available, by other Australian banks.

TABLE 268.—Exchange Rates, Australia on Other Centres.

Period.	London.	New Zealand.	South Africa.	New York.	Montreal.	France.	
	£A. to			\$	\$	Francs.	
	£stg.100.	£N.Z.100.	£S.A.100.	to £A.			
1929—June ... ..	100.75	100.00	99.13	4.82	4.85	123.0	
Year ended June—	Average of rates at end of each month.						
1936 ... ..	125.25	100.75	124.75	3.96	3.98	59.9	
1937 ... ..	125.25	100.75	124.75	3.94	3.94	78.5	
1938 ... ..	125.25	100.75	124.75	3.97	3.99	122.4	
1939 ... ..	125.25	100.33	124.70	3.78	3.79	141.8	
1946 ... ..	125.25	100.25	124.84	3.22	3.55	...	
1946, July—December ... ..	125.25	100.25	124.88	3.22	3.23	383.2	
Period.	Belgium.	Switzerland.	Sweden.	India.	Hong Kong.	Singapore.	Java.
	Francs.	Francs.	Kronor.	Rupees.	\$	\$	Guilder.
	to £A.						
1929—June ... ..	173.3	25.02	17.96	13.60	10.08	8.73	12.04
Year ended June—	Average of rates at end of each month.						
1936 ... ..	117.1	12.15	15.50	10.57	10.21	6.82	5.82
1937 ... ..	116.7	16.32	15.50	10.57	12.84	6.81	6.92
1938 ... ..	117.5	17.27	15.51	10.61	12.83	6.83	7.15
1939 ... ..	111.6	16.68	15.51	10.69	12.83	6.86	6.98
1946 ... ..	...	13.83	...	10.64	...	...	...
1946, July—December ... ..	141	13.85	11.60	10.64	12.78	6.81	8.45

*Price of Gold.*

The Commonwealth Bank fixes the price which it is prepared to pay for gold lodged at the mint in Australia. This price is based on the forward open market price abroad, adjusted to the ruling rate of exchange for telegraphic transfers, less a small allowance for realisation charges. The price of gold in London has been controlled by the Bank of England since September, 1939.

The following table shows the average price per oz. of fine gold and the average value of the sovereign in London and Australia in each of the years ended 30th June, 1929 to 1946. London prices are expressed in sterling and Australian prices in local currency:—

TABLE 269.—Prices of Gold in London and Australia.

Year ended 30th June.	London.		Australia.		
	Average Price per Oz. Fine.	Average Value of Sovereign.	Average per Oz. Fine.		Average Value of Sovereign.
			Price.	Premium.	
	Stg. £ s. d.	Stg. £ s. d.	A £ s. d.	Per cent.	A £ s. d.
1929 ... ..	4 4 11	1 0 0	4 4 11	.....	1 0 0
1930 ... ..	4 4 11	1 0 0	4 6 3	1.5	1 0 4
1931 ... ..	4 4 11	1 0 0	4 19 4	16.9	1 3 5
1932 ... ..	5 7 7	1 5 4	6 11 4	54.6	1 10 11
1933 ... ..	6 1 7	1 8 7	7 9 9	76.2	1 15 3
1934 ... ..	6 11 8	1 11 0	8 2 0	90.6	1 18 2
1935 ... ..	7 1 3	1 13 3	8 14 10	105.7	2 1 2
1936 ... ..	7 0 8	1 13 1	8 14 0	104.8	2 1 0
1937 ... ..	7 0 10	1 13 2	8 15 3	106.2	2 1 3
1938 ... ..	7 0 0	1 12 11	8 13 10	104.6	2 0 11
1939 ... ..	7 6 9	1 14 7	9 2 9	115.1	2 3 0
1940 ... ..	8 4 9	1 18 9	10 8 4	145.2	2 9 1
1941 ... ..	8 8 0	1 19 7	10 13 5	151.2	2 9 2
1942 ... ..	8 8 0	1 19 7	10 17 4	148.7	2 8 7
1943 ... ..	8 8 0	1 19 7	10 9 0	146.0	2 8 0
1944 ... ..	8 8 0	1 19 7	10 9 0	146.0	2 8 0
1945 ... ..	8 8 3	1 19 7	10 11 10	149.3	2 8 9
1946 ... ..	8 12 3	2 0 0	10 15 3	153.4	2 10 0

Stg.—Sterling.

A.—Australian Currency (see exchange rates, page 316.)

Current Australian gold prices are published in the "Monthly Summary of Business Statistics."

The price per oz. of fine gold in Australia was unchanged at £10 9s. from January, 1942, until it rose to £10 10s. in June, 1944; there were further rises to £10 12s. in September, 1944, £10 13s. 6d. in May, 1945, and £10 15s. 3d. in June, 1945.

### INCORPORATED COMPANIES.

The legislation affecting the formation and conduct of companies in New South Wales is contained in the Companies Act, 1936, as amended.

The formation of a company, association, or partnership of more than ten persons in a banking business, or of twenty in any other business trading for profit, is prohibited, unless it is registered under the Companies Act, or incorporated under some other enactment, by royal charter or by letters patent.

Seven persons or more may associate to form an incorporated company except that for a proprietary company the minimum number is two.

Companies may be of four kinds according to the liability of members to contribute to capital or to assets in the event of winding-up. They may be limited liability companies with the liability of members limited (1) to the amount unpaid on shares or (2) by guarantee; or they may be (3) unlimited companies, in which the liability of members is unlimited, or (4) no-liability companies in which calls made on shares are not enforceable against members. No-liability companies may be formed only in connection with mining operations and shares on which calls are unpaid for twenty-one days are forfeited automatically. Companies with liability limited by shares, not being no-liability companies, may be registered as proprietary companies under conditions which restrict the rights of members to transfer shares, limit membership and prohibit the sale of shares and raising of loans by public subscription.

The issue of capital by companies is subject to control by the Commonwealth Treasurer in terms of the National Security (Capital Issues) Regulations described on page 289.

Particulars relating to the registration of limited companies in New South Wales in each year since 1937 are shown below:—

TABLE 270.—Registration of Limited Companies in New South Wales.

Year.	New Registrations.					Increases of Capital.		Existing Companies certified as Proprietary.
	Companies limited by Guarantee.	Companies limited by Shares.				No.	Nominal Amount.	
		Proprietary.		Other.				
		No.	Nominal Capital.	No.	Nominal Capital.			
1937	23	925	£ 5,678,415	75	£ 13,904,000	136	£ 9,106,000	4,180
1938	16	786	11,746,903	58	7,309,500	105	9,009,014	140
1939	27	811	12,840,725	34	3,268,500	99	5,977,300	25
1940	13	539	5,861,095	14	484,500	78	7,365,350	17
1941	8	152	1,636,405	5	1,321,250	44	3,122,079	9
1942	19	31	310,100	1	.....	12	2,369,400	10
1943	11	30	469,500	2	35,000	12	834,300	9
1944	11	51	1,511,010	4	227,000	12	2,660,000	9
1945	16	223	6,714,299	12	1,045,000	63	2,478,000	8
1946	26	1,535	21,926,455	14	2,477,000	169	7,215,634	4

Following the commencement of the Companies Act, 1936, which provided, for the first time, for the registration of proprietary companies in New South Wales, there was a marked increase in new registrations of limited companies and a large number of existing companies were certified as proprietary companies.

No no-liability mining companies were registered in the period 1940 to 1945; the number registered in the three years 1937 to 1939 was eight with nominal capital £383,525, and in 1946 there was one registration with nominal capital £10,000.

The number of registrations of foreign companies (*i.e.*, those with original registration outside New South Wales) was 25 in 1944, 27 in 1945, and 66 in 1946.

The total number of limited companies which appeared to be in active existence in New South Wales at the end of various years since 1929 was as follows:—

TABLE 271.—Companies Operating in New South Wales.

End of Year.	Companies.		End of Year.	Companies.	
	Local.	Foreign.		Local.	Foreign.
	No.	No.		No.	No.
1929 ... ..	6,044	935	1941 ... ..	8,757	1,154
1932 ... ..	5,750	902	1942 ... ..	8,613	1,163
1936 ... ..	7,234	974	1943 ... ..	8,563	1,175
1938 ... ..	8,204	1,090	1944 ... ..	8,573	1,195
1939 ... ..	8,639	1,123	1945 ... ..	8,733	1,220
1940 ... ..	8,837	1,145	1946 ... ..	10,235	1,275

The local companies in 1946 consisted of 1,394 public and 8,590 proprietary companies and 251 associations limited by guarantee not carrying on business for profit. There were also 40 no-liability companies.

#### STOCK EXCHANGE INDEX.

The following index of prices of company shares on the Sydney Stock Exchange is based on the ratio of prices to par value of ordinary shares. The prices represent the average values in the respective months, and are based on records of actual sales or, where no sales have taken place, on a valuation determined from previous sales and current quotations. In addition to the indexes for component groups and the total index for 75 companies, an index has been compiled in respect of 34 companies in whose shares there is a considerable volume of business. The indexes are unweighted, the par value of shares being taken as base (100). Adjustments have been made to provide for the effects of reductions in capital and capitalisation of reserves.

The prices of shares on the Stock Exchange were controlled in terms of National Security (Economic Organisation) Regulations from February, 1942, until 31st December, 1946 (see page 290).

TABLE 272.—Stock Exchange Index (Sydney).

Average for year or month.	23 Manu- facturing and Distribu- ting Companies.	10 Retail Companies.	8 Public Utility Companies.	5 Pastoral and Finance Companies.	5 Insurance Companies.	Total, 75 Companies.	34 Active Shares included in foregoing.
1929... ..	174.0	172.0	127.7	158.4	229.6	166.6	164.5
1930... ..	113.7	103.2	107.6	85.8	167.5	112.2	111.6
1931... ..	81.0	67.6	90.6	79.1	130.4	81.9	87.0
1932... ..	102.7	81.7	116.2	98.6	155.4	98.3	105.6
1933... ..	127.8	102.5	137.2	121.0	179.0	119.3	127.2
1934... ..	153.2	138.5	161.0	147.1	226.8	146.1	152.4
1935... ..	173.8	162.4	178.5	137.4	269.1	163.6	169.2
1936... ..	194.0	188.2	180.1	148.5	278.5	177.1	185.5
1937... ..	212.1	196.2	182.1	166.5	276.5	187.1	196.7
1938... ..	208.0	181.9	177.5	135.1	257.5	178.0	184.5
1939... ..	212.4	170.7	159.6	121.8	259.6	175.0	183.6
1940... ..	211.3	160.8	137.6	121.8	250.2	167.2	180.4
1941... ..	217.8	168.2	139.0	122.0	249.9	169.2	182.8
1942... ..	196.9	151.5	124.3	119.3	227.2	154.1	166.2
1943... ..	234.7	184.3	142.4	133.5	253.2	180.8	197.4
1944... ..	238.0	196.6	153.0	139.4	256.5	187.5	202.6
1945... ..	247.2	210.3	172.2	149.3	269.9	198.9	213.8
1946... ..	280.6	240.4	190.9	159.9	308.7	222.7	240.1
1945—							
January ...	240.6	203.5	162.7	146.3	264.1	192.8	207.3
February ...	241.7	205.0	168.5	148.0	264.5	194.7	209.3
March ...	242.2	206.9	170.1	148.7	264.6	195.4	209.8
April ...	242.3	207.3	170.2	148.8	264.6	195.7	210.0
May ...	242.2	207.2	170.5	148.4	264.6	195.7	210.0
June ...	242.3	207.7	170.4	148.0	264.6	195.7	210.1
July ...	242.2	207.4	170.3	147.3	264.6	195.6	210.0
August ...	242.3	207.3	170.3	146.8	264.6	195.6	209.9
September ...	242.7	207.8	170.8	146.7	264.6	195.8	210.3
October ...	255.3	216.3	178.2	150.8	274.6	204.5	220.2
November ...	266.3	224.1	182.1	156.9	291.5	212.8	229.7
December ...	266.0	224.0	182.3	154.7	291.5	212.6	229.3
1946—							
January ...	266.0	225.8	182.1	153.0	291.5	212.8	229.0
February ...	266.2	226.5	182.3	154.0	291.5	213.0	229.2
March ...	267.3	227.6	184.0	157.2	292.6	213.5	230.3
April ...	278.9	236.8	190.2	161.8	306.2	221.5	240.1
May ...	280.5	239.5	191.1	162.8	306.9	222.8	241.2
June ...	280.5	239.4	190.9	161.0	306.9	222.3	240.8
July ...	280.5	239.5	190.5	161.6	306.9	222.3	240.6
August ...	285.7	244.6	193.6	165.1	312.2	226.2	244.5
September ...	290.5	250.1	196.2	163.7	322.5	229.9	247.1
October ...	289.0	251.9	196.4	169.4	322.5	229.3	245.6
November ...	290.0	251.8	195.9	158.0	322.5	229.1	245.7
December ...	292.4	251.6	197.3	160.7	322.5	229.7	247.2

Current indexes of share prices are published in the "Monthly Summary of Business Statistics."

#### CO-OPERATIVE SOCIETIES.

The laws relating to co-operation in New South Wales are embodied in the Co-operation Act, 1923-1945, and additional provisions relating to co-operative building societies are contained in the Housing Act, 1936-1937.

The Co-operation Act is a comprehensive measure, affording wide scope for co-operative development. It authorises co-operative societies to engage in all forms of economic activity except insurance, unless specially authorised by the Governor, and banking.

Societies may be of various kinds, viz.: (a) rural societies to assist producers in conducting their operations and in marketing products; (b) trading societies to carry on business, trade, or industry; (c) community settlement societies to acquire land and settle or retain persons thereon and to provide any common service or benefits; (d) community advancement societies to provide any community service, *e.g.*, water, gas, electricity, transport, recreation, etc.; (e) building societies—terminating or permanent—to assist members to acquire homes or other property; (f) rural credit societies to make or arrange loans to members for the purpose of assisting rural production; (g) small loans (formerly urban credit) societies to assist members to acquire plant, furniture, etc., or to commence business or trade; (h) investment societies to enable members to combine to secure shares in a company or business or to invest in securities. Societies of the same kind may combine into co-operative associations, and such associations of all kinds may form unions.

Societies are corporate bodies with limited liability except that a rural credit society may be formed with unlimited liability. Adequate provision is made to safeguard the funds and financial interests of the societies. Powers of supervision are vested in the Registrar of Co-operative Societies.

Co-operative effort for production is a prominent feature of the dairying industry, most of the butter factories being organised on a co-operative basis.

Further details regarding the co-operative movement are given in the chapters of this Year Book relating to "Social Condition", "Agriculture" and the "Dairying Industry".

The number of co-operative societies on the register at 30th June, 1946, was 980, including 7 permanent building societies registered under the Building and Co-operative Societies Act of 1901. There were 106 trading, 234 rural, 563 building, 3 investment, 10 small loan, 1 community settlement, and 47 community advancement societies; also 15 associations of co-operative societies and one union of co-operative associations. Of these societies 70 were in liquidation at 30th June, 1946.

#### *Co-operative Trading and Rural Societies.*

The majority of the co-operative trading societies in active operation are consumers' distributive societies, organised on the Rochdale plan of "dividend upon purchase", conducting retail stores. They buy their supplies largely from a wholesale co-operative society with which a considerable number of them are affiliated. The societies have met with success in the Newcastle and other mining districts, and to a limited extent in other centres where large numbers of industrial workers reside.

Particulars regarding the transactions of the co-operative trading and rural societies in 1938-39 and the last two years are shown on page 322.

TABLE 273.—Co-operative Trading and Rural Societies.

Particulars.	Trading Societies.			Rural Societies.		
	1938-39.	1944-45.	1945-46.	1938-39.	1944-45.	1945-46.
Societies (active) ... ..	45	44	56	123	146	185
Members ... ..	40,806	55,057	58,955	55,860	63,020	66,041
Members Funds—	£	£	£	£	£	£
Share capital ... ..	591,854	907,957	999,571	1,077,787	1,225,147	1,290,302
Reserves ... ..	422,299	569,937	604,475	1,026,739	1,406,179	1,610,497
Total... ..	1,014,153	1,477,894	1,604,046	2,104,526	2,631,326	2,900,799
Turnover ... ..	2,701,131	3,467,870	3,645,635	17,451,032	22,612,739	24,063,795
Net Income ... ..	200,143	310,199	325,290	177,773	290,935	271,953

The number of societies, as shown in the table, does not include societies in liquidation nor new societies from which annual returns were not due.

#### *Co-operative Building Societies.*

Co-operative building societies are classified as (1) permanent, (2) Starr-Bowkett terminating societies and (3) other terminating societies. A summary of the operations of the building societies for which the annual return was made in the year 1944-45 is shown below:—

TABLE 274.—Co-operative Building Societies.—Year ended June, 1945.

Particulars.	Permanent Societies.	Starr-Bowkett Societies.	Other Terminating Societies.
	No.	No.	No.
Societies ... ..	13	71	236
Shareholders or Members ... ..	4,482	26,449	23,023
Assets—	£	£	£
Advances on Mortgage ... ..	1,429,955	1,215,503	*13,029,632
Other ... ..	834,832	398,785	142,493
Total Assets... ..	2,264,787	1,614,288	13,172,125
Liabilities—			
Paid up Capital ... ..	1,021,430	.....	.....
Members' Subscriptions ... ..	.....	1,355,682	3,435,751
Reserve Funds and Surplus ... ..	401,016	159,017	349,914
Deposits ... ..	716,693	.....	.....
Advances from Lending Institution ... ..	107,270	.....	9,341,376
Other ... ..	18,378	99,589	45,084
Total Liabilities ... ..	2,264,787	1,614,288	13,172,125

\* Aggregate amount advanced to members; repayments not deducted.



In Starr-Bowkett building societies loans free of interest are made to members as subscriptions accumulate, the rights of members to appropriation being determined by ballot or by sale. The duration of societies varies, but frequently over 20 years elapse before the last loan is made. When an advance has been made to all members remaining in the society the process of winding-up commences and share capital is repaid as repayments in respect of loans accumulate.

The terminating building societies, other than Starr-Bowkett, obtain funds from banks and other financial institutions and make advances to members as they apply for them. The repayment of the loans obtained by nearly all these societies is guaranteed by the Government of New South Wales. The expansion of the activities of such societies is illustrated below:—

TABLE 275.—Terminating Building Societies with Government Guarantees, 1938 to 1947.

Particulars.	At 30th June—			
	1939.	1940.	1941.	1947.*
Societies granted Government Guarantee No.	156	165	194	393
Members ... .. No.	18,787	19,493	20,959	35,426
Shares ... .. No.	238,502	253,748	282,455	566,113
Nominal Share Capital ... .. £	13,020,761	13,824,565	15,208,382	29,614,470
Funds Available ... .. £	11,364,825	12,599,825	14,299,825	34,606,825
Loans Approved ... .. No.	12,106	15,337	17,543	28,457
Amount ... .. £	8,653,449	11,156,855	13,040,585	23,147,705
Advances to Members ... .. £	7,505,392	10,514,492	12,372,572	19,083,540

\* At 31st March.

In addition to the societies to which the particulars in the foregoing table relate, there were twenty-six societies without Government guarantee.

Further details of these societies are contained in the chapter "Social Condition" of this volume.

#### FRIENDLY SOCIETIES.

The affairs of the friendly societies in New South Wales are conducted in accordance with the Friendly Societies Act of 1912 and its amendments. The societies are required to register, and to furnish periodical returns to the Registrar, giving details relating to membership, sickness, mortality, benefits and finances. In this chapter reference is made to the finances of the societies which provide benefits such as medical attendance, sick pay, and funeral donations. Other matters relating to friendly societies, and to miscellaneous societies registered under the Friendly Societies Act, such as dispensaries, medical institutes, and accident societies, are discussed in the chapter entitled "Social Condition."

The affairs of the friendly societies are subject to State supervision and provision has been made for the actuarial certification of tables of contributions, for valuations at least once within five years, the investigation of accounts, and other measures for safeguarding the funds. A society

is not entitled to registration unless tables of contribution in respect of sickness and death benefits and policies of endowment are supported by an actuarial certificate.

As a general rule, the moneys received or paid on account of a particular benefit must be kept in a separate account and be used only for the specific purpose.

Particulars regarding quinquennial valuations up to 1938 were published on page 498 of the 1939-40 edition and in earlier issues of the Year Book.

#### *Accumulated Funds.*

The following statement illustrates the growth of the funds of the Friendly Societies between 1911 and 1939; later information is not available:—

TABLE 276.—Friendly Societies, Balance of Funds.

At 30th June.	Sickness and Funeral Funds.	Medical and Management Fund.	Other Funds.	All Funds.	
				Total.	Per Member.
	£	£	£	£	£
1911*	1,378,722	78,264	49,852	1,506,838	9.14
1921	2,134,339	194,358	83,065	2,411,762	12.08
1931	3,640,368	261,663	117,209	4,019,240	16.58
1936	4,039,557	336,755	110,191	4,486,503	21.69
1937	4,160,635	351,531	119,335	4,631,501	22.16
1938	4,287,123	360,965	120,970	4,769,058	22.48
1939	4,412,391	368,971	127,101	4,908,463	23.19

\* At 31st December.

At 30th June, 1939, approximately 63 per cent. of accumulated funds were invested in mortgages, 17 per cent. in public securities, and 14 per cent. in buildings and other freehold property. These percentages reflect a marked change in the disposition of investment since 1929, when mortgages represented 80 per cent. of total investments and public securities only 1.5 per cent.

#### *Receipts and Expenditure.*

The receipts and expenditure of the friendly societies in various years from 1929 to 1939 are shown in the following statement:—

TABLE 277.—Friendly Societies, Receipts and Expenditure.

Year ended 30th June	Receipts.				Expenditure.					
	Contributions.	Interest.	Other.	Total.	Sick Pay.	Funeral Donations.	Medical Attendance and Medicine.	Expenses of Management.	Other.	Total.
	£	£	£.	£	£	£	£	£	£	£
1929	832,187	219,788	66,173	1,118,148	319,787	77,928	349,381	161,300	42,638	945,034
1931	765,113	210,164	49,280	1,024,567	307,979	75,747	298,299	171,820	76,076	929,921
1935	712,140	176,254	30,676	919,070	251,803	85,855	277,997	147,455	85,304	845,472
1936	731,637	187,867	94,807	1,014,311	260,745	91,672	285,891	153,636	88,721	880,065
1937	750,764	194,192	45,544	990,500	251,279	86,406	295,000	167,976	54,241	845,502
1938	769,100	202,036	31,884	1,003,020	260,815	87,947	307,417	163,744	45,540	865,463
1939	767,621	208,651	38,264	1,014,536	278,738	89,368	306,029	165,051	35,946	875,131

Disbursements on account of benefits amounted to £741,096 in 1928-29 and £674,135 in 1938-39. The decrease in the period was a result of declining membership and adjustment of benefits. The average cost of medical attendance and medicine per adult member was 30s. 10d. in 1928-29, and 32s. 1d. in 1938-39.

After allowing for interfund transfers and payments from one branch to another, expenses of management amounted to £163,445 in 1938-39, representing 15s. 5d. per head of mean membership, and 21.3 per cent. of contributions and 16.2 per cent. of total income.

#### INSURANCE.

Insurance in New South Wales is mainly the province of private organisations. Social benefits, such as those provided by friendly societies, pensions for widows, aged persons, invalids, etc., provided by State or Commonwealth Government and the Government pension funds are described in the chapter "Social Condition" of this Year Book.

#### *Insurance Legislation.*

The Commonwealth Government possessed power to legislate in respect of insurance but until 1945 the conduct of insurance business in Australia was governed largely by State laws.

In New South Wales, State legislation regarding insurance was scanty, apart from laws dealing with workers' compensation, described in the chapter "Employment" of this Year Book, and with motor vehicles third-party risks, further reference to which is made at page 331.

A comprehensive Commonwealth measure, the Life Insurance Act, 1945, superseded State enactments in that regard as from 20th June, 1945. Under it life insurance business throughout Australia is regulated in ways designed to afford maximum protection to policy holders.

The Act is administered, subject to the Treasurer's direction, by an Insurance Commissioner who has wide powers to investigate the affairs of any company. After investigation he may, subject to a right of appeal to the Court, issue directions to a company or apply to the Court for the appointment of a judicial manager or for an order to wind up the company.

Every life insurance company must register with the Commissioner, must lodge deposits (maximum £50,000) with the Treasurer, must furnish certified statements of accounts, reports of actuarial valuations and statistical returns, and may not use any form of proposal, policy or written matter deemed by the Commissioner to be misleading. Each company must establish one or more statutory funds for the receipt of all moneys relating to its life insurance business and may apply the assets of a fund only for the purpose of the class of life insurance business for which that fund was created. An actuarial investigation of the company's affairs and of each statutory fund must be made at intervals not exceeding five years, observing a prescribed minimum basis of valuation.

A distribution of dividends to shareholders or of new bonuses to policy-holders may not be made unless a surplus is disclosed by the valuation; of any surplus derived from participating policies registered in Australia the allocation for distribution to shareholders may not exceed 25 per cent. of the amount allocated to the holders of those policies.

Rates of premium must be approved by an actuary. Rules govern the assignment or mortgage of policies, the protection of policies against creditors in the event of bankruptcy, and the determination of surrender values and forfeitures. A policy holder is entitled to a paid-up policy if he has paid three years' premiums and to the surrender value in cash if the policy has been in force for six years. The amount payable on the death of a child under ten years of age is limited. A company must maintain a register of policies in each State in which it operates; a policy-holder may elect to have a policy registered in a State other than that in which he resides. The Act contains provisions authorising the establishment of a Commonwealth Government Insurance Office to conduct life and other classes of insurance business.

*Life Assurance Business in New South Wales.*

There are nineteen institutions accepting new life assurance business in New South Wales, of which seventeen are Australian, one is English and one New Zealand. In addition, two institutions (one Australian, and one American) carry a small amount of business contracted in earlier years.

Statistics of life assurance are compiled from returns furnished by each institution in relation to the period of twelve months ended on its balance-date, which, in most instances, occurs between June and December. Returns were not collected in respect of the year 1941.

The aggregate sum assured under ordinary and industrial policies in force in New South Wales amounted to £311,495,000 in 1946. Bonus additions amounted to £29,690,000 in 1940; later information is not available.

A comparative statement of the ordinary and industrial business in force in New South Wales is shown below:—

TABLE 278.—Life Assurances in Force\* in New South Wales, 1921 to 1946.

Year.	Ordinary Branch.				Industrial Branch.			
	Policies.	Sum Assured.	Bonus Additions.	Annual Premiums.	Policies.	Sum Assured.	Bonus Additions.	Annual Premiums.
	No.	£000	£000	£000	No.	£000	£000	£000
1921	236,973	64,018	8,048	2,155	358,493	11,711	†	731
1929	283,516	100,130	17,285	3,323	620,027	27,801	720	1,696
1931	269,653	97,240	19,231	3,198	576,053	25,490	769	1,518
1936	339,169	123,384	23,396	4,042	785,467	34,161	1,406	2,044
1939	421,219	153,272	27,127	5,004	962,499	43,202	1,870	2,591
1940	438,116	159,144	27,691	5,186	1,010,828	45,548	1,999	2,727
1942	486,028	174,833	†	5,720	1,123,511	51,883	†	3,079
1943	510,294	183,799	†	6,092	1,170,071	55,083	†	3,252
1944	544,475	199,290	†	6,700	1,221,480	59,059	†	3,468
1945	577,398	215,733	†	7,364	1,265,696	63,041	†	3,673
1946	632,307	243,419	†	8,472	1,308,385	68,076	†	3,919

\* After deducting reassurances. † Not Available.

According to a broad classification of the business in 1940, the sum assured in the ordinary branch consisted of "whole-life" assurances payable only at death, £92,185,000; endowment assurances payable at the end of a specified period, or prior death, £62,640,000, and pure endowment payable on survival for a specified period £4,319,000. In the industrial branch the corresponding classes were £1,700,000, £42,237,000 and £1,611,000 respectively.

The development of life assurance in relation to the population is shown in the following statement, which illustrates also the increase in the average amount per policy and in the premium payable. Bonus additions are not included.

TABLE 279.—Life Assurance in New South Wales, Average per Head and per Policy, 1921 to 1946.

Year.	Policies per 1,000 of Population.		Sum Assured per Head of Population.		Average Sum Assured per Policy.		Average Annual Premium payable per Policy.	
	Ordinary.	Industrial.	Ordinary.	Industrial.	Ordinary.	Industrial.	Ordinary.	Industrial.
	No.	No.	£ s. d.	£ s. d.	£	£	£ s. d.	£ s. d.
1921	111	168	30 1 3	5 10 0	270	33	9 1 10	2 0 9
1929	112	245	39 11 8	10 19 10	353	45	11 14 5	2 14 8
1931	105	223	37 14 3	9 17 9	361	44	11 17 2	2 12 8
1939	153	350	55 16 0	15 14 7	364	45	11 17 7	2 13 10
1942	173	399	62 1 9	18 8 6	360	46	11 15 4	2 14 10
1943	180	412	64 13 10	19 7 9	360	47	11 18 9	2 15 7
1944	190	425	69 8 4	20 11 5	366	48	12 6 1	2 16 9
1945	199	437	74 8 3	21 14 11	374	50	12 15 1	2 18 0
1946	216	447	83 4 7	23 5 6	385	52	13 8 0	2 19 11

Transactions in annuities are not numerous, the business in force in New South Wales in 1940 being 1,537 policies for an aggregate amount of £186,135 per annum in the ordinary branch, and one policy representing £22 per annum in the industrial department.

*New Business in New South Wales.*

Particulars of the new life assurance business, ordinary and industrial, effected in New South Wales in various years since 1929 are shown in the following table:—

TABLE 280.—Life Assurances, New Business in New South Wales, 1929 to 1946.

Year.	Ordinary Branch.			Industrial Branch.		
	Number of Policies.	Sum Assured.	Annual Premiums Payable.	Number of Policies.	Sum Assured.	Annual Premiums Payable.
		£	£		£	£
1929	...	26,422	11,650,396	405,031	124,013	6,821,670
1931	...	18,784	7,460,868	263,102	89,736	4,203,452
1936	...	51,073	16,802,436	572,551	158,681	6,892,344
1939	...	50,520	18,179,537	595,366	156,787	7,539,660
1940	...	42,869	14,581,759	492,344	149,103	7,095,873
1942	...	45,766	15,441,838	543,964	122,077	6,583,572
1943	...	43,218	15,746,924	590,965	105,018	6,159,221
1944	...	51,278	21,037,984	844,827	110,560	7,062,191
1945	...	53,927	23,998,758	952,893	109,862	7,512,997
1946	...	81,677	38,077,853	1,402,523	128,266	9,803,114

The total sum assured under new ordinary and industrial policies issued increased from £28,100,175 in 1944, to £31,511,755 in 1945 and to £47,880,967 in 1946; previously the largest amount recorded was £26,061,700 in 1937, comprising new ordinary policies, £18,251,496 and industrial, £7,810,204.

*Discontinuances in New South Wales.*

Causes of discontinuance of policies on the register for New South Wales since 1942 (the first year for which this information is available) are shown below. Policies transferred from New South Wales registers to registers outside the State are not included.

TABLE 281.—Life Assurance in New South Wales, Causes of Discontinuances, 1942 and 1946.

Year.	Death.		Maturity.		Surrender.		Lapse.	
	Policies.	Sum Assured.	Policies.	Sum Assured.	Policies.	Sum Assured.	Policies.	Sum Assured.
Ordinary Branch.								
	No.	£	No.	£	No.	£	No.	£
1942 ...	3,841	1,586,505	5,060	909,752	6,386	2,527,362	7,960	3,109,899
1943 ...	4,319	1,860,860	5,135	902,844	4,910	1,869,017	5,212	1,855,412
1944 ...	3,893	1,502,494	5,255	939,746	5,141	1,950,992	3,763	1,849,332
1945 ...	4,858	1,914,753	5,503	1,199,892	6,952	2,867,278	5,078	1,655,106
1946 ...	4,627	1,851,527	5,489	1,460,010	10,309	3,851,814	7,403	2,730,211
Industrial Branch.								
	No.	£	No.	£	No.	£	No.	£
1942 ...	8,276	297,873	21,193	947,734	5,684	280,660	37,523	2,088,735
1943 ...	8,621	323,008	23,584	1,073,884	3,512	174,691	22,815	1,379,713
1944 ...	8,100	313,265	25,941	1,186,887	3,835	180,755	21,503	1,401,003
1945 ...	8,467	336,743	27,359	1,241,110	5,926	233,791	24,228	1,734,947
1946 ...	8,824	352,387	28,202	1,281,729	10,970	475,086	36,492	2,600,827

*Revenue and Expenditure in New South Wales and Elsewhere.*

The majority of the assurance societies operating in New South Wales transact a large amount of business outside the State, and it is not practicable to present statements of their finances in relation to New South Wales business alone. For this reason the review of the revenue and expenditure of the societies operating in New South Wales, contained in the following table, relates to the aggregate business of the Australian societies and one New Zealand society, and the Australian business of other overseas societies.

The assurance business transacted in New South Wales by the Australian societies and the New Zealand society represents in the aggregate about one-quarter of their total business, while the Australian business of the overseas societies is insignificant in comparison with their total business.

TABLE 282.—Life Assurance Societies, Revenue and Expenditure, 1921 to 1946.

(Including business outside New South Wales.)

Year.	Revenue.			Expenditure.					
	Premiums. *	Interest, Dividends, etc.	Total.	Claims, Surrenders, Annuities.	Cash Bonuses and Dividends.	Expenses.	License Fees and Taxes.	Other.	Total.
Ordinary Branch.									
	£000	£000	£000	£000	£000	£000	£000	£000	£000
1921	8,485	4,264	12,749	5,289	234	1,582	187	334	7,628
1929	14,285	7,938	22,223	9,315	456	2,328	622	460	13,181
1939	21,442	9,732	31,174	14,734	504	3,093	580	1,380	20,291
1944	27,037	11,681	38,718	16,778	200	3,279	901	1,080	22,247
1945	29,694	11,996	41,690	18,589	233	3,597	989	654	24,062
1946	33,221	12,585	45,806	19,579	263	4,802	1,080	746	26,470
Industrial Branch.									
	£000	£000	£000	£000	£000	£000	£000	£000	£000
1921	2,233	421	2,654	441	67	868	19	26	1,421
1929	5,044	1,274	6,318	1,938	89	1,795	93	147	4,062
1939	7,844	2,188	10,032	4,334	73	2,485	120	281	7,293
1944	10,298	2,694	12,992	5,496	46	2,702	252	213	8,709
1945	11,021	2,774	13,795	5,935	45	2,839	265	284	9,368
1946	11,588	2,857	14,445	6,267	48	3,128	274	251	9,968

\* Includes consideration for annuities.

*Fire, Marine and General Insurance.*

The nature of the general insurances effected in New South Wales is indicated by statistics in Table 283 and 284 which were compiled from returns furnished to the Bureau of Statistics by insurance companies with offices situated within the State. The annual return of each company relates to the period of twelve months ended on its balancing date between 1st July and 30th June. In 1945-46 there were 147 companies with offices in New South Wales.

Owing to a change in the form of return, introduced to reduce the work of compilation, statistics of general insurance business since 1941-42 are not strictly comparable with those for previous years as published in issues of the Year Book up to 1940-41.

The amount of premium income and claims in each of the years 1943-44 to 1945-46, according to twenty-one classes of insurance, is shown in Table 283. Premium income, as returned by the individual companies, represents the gross premiums in respect of insurances completed in the State, less any bonuses credited to policy holders and amounts paid to re-insurers in Australia. Claims are shown as the amounts paid and outstanding, less sums recoverable under re-insurances in Australia. The companies also contribute towards the cost of maintaining the fire brigade services; their contributions amounted to £277,052 in 1943-44, £277,924 in 1944-45 and £285,133 in 1945-46.

TABLE 283.—General Insurances\* Transacted in New South Wales,  
Premiums and Claims, 1943-44 to 1945-46.

Group	Class of Insurance.	1943-44.		1944-45.		1945-46.	
		Premiums	Claims.	Premiums	Claims.	Premiums	Claims.
A	Fire ... ..	£ 2,554,185	£ 681,282	£ 2,590,631	£ 662,784	£ 2,739,521	£ 650,430
	Householders' Comprehensive... ..	184,791	48,798	228,559	63,957	255,562	76,366
	Sprinkler Leakage ... ..	5,827	237	5,495	881	6,506	387
	Loss of Profits ... ..	116,472	16,075	132,628	12,944	136,114	18,371
	Hailstone ... ..	95,562	61,545	43,202	18,290	157,832	104,549
B	Marine ... ..	1,428,060	256,478	872,836	408,736	741,995	182,411
C	Motor Vehicle ... ..	728,811	323,344	700,956	363,831	811,915	537,601
	" Cycle ... ..	6,827	1,945	7,081	2,934	11,874	5,290
	" Compulsory Third Party	382,970	189,996	394,615	196,440	437,828	242,546
D	Worker's Compensation ... ..	†2,961,737	2,126,703	†3,112,903	2,294,855	†3,282,514	2,582,115
E	Public Risk Third Party ... ..	85,872	12,173	89,051	20,158	97,506	20,771
	General Property ... ..	1,001	508	2,100	920	1,796	(—) 100
	Plate Glass ... ..	68,560	19,777	72,563	28,091	74,206	33,020
	Boiler ... ..	16,927	3,926	23,444	4,093	31,099	4,713
	Livestock ... ..	22,070	5,298	31,251	15,206	44,220	24,889
	Burglary ... ..	126,616	24,377	143,052	31,992	163,566	61,733
	Guarantee ... ..	29,766	2,300	28,579	124	31,214	1,926
	Pluvius ... ..	11,649	7,272	17,668	6,312	16,472	9,989
	Aviation ... ..	33,220	125,986	26,443	66,385	40,657	1,500
	All Risks ... ..	50,667	18,504	69,555	26,305	68,377	33,529
	Other ... ..	293,712	128,018	336,477	113,536	358,711	136,130
	Total ... ..	†9,205,911	4,053,442	†8,920,089	4,338,780	†9,509,575	4,728,256

\* Exclusive of Life Insurances.

† See note † Table 284.

Fire, workers' compensation, marine and motor vehicles are the principal classes of insurance. They yielded approximately 86 per cent. of the premiums in each of the three years. For all classes of insurance the proportion of claims to premiums was 44 per cent. in 1943-44, and nearly 50 per cent. in 1944-45 and 1945-46.

In the following statement the separate classes of insurance are combined to form five groups as indicated in the first column of Table 283. For each group the amounts of premiums and claims are shown; also a proportion of charges for commission, agents' charges and expenses of management in accordance with an allocation made by the companies. Investment income and taxation charges are not distributed among the groups.

TABLE 284.—General Insurances Transacted in New South Wales, Premiums, Claims, Expenses, etc., 1943-44 to 1945-46.

Revenue and Expenditure.	Class of Insurance.*					
	A Fire, Sprinkler, Loss of Profits, etc.*	B Marine.	C Motor Vehicles.	D Workers' Com- pensation.	E Other.	Total.
Year 1943-44.						
Premiums ... ..	£ 2,956,837	£ 1,428,669	£ 1,118,608	£ †2,961,737	£ 740,060	£ †9,205,911
Interest, Dividends, Rents, etc. ...	...	...	...	...	...	459,523
Total Revenue ... ..	...	...	...	...	...	9,665,434
Claims ... ..	807,937	255,478	515,285	2,126,703	348,039	4,053,442
Contribution to Fire Brigades ...	277,052	...	...	...	...	277,052
Commission and Agents' Charges ...	464,080	97,995	120,328	93,869	115,435	891,707
Management Expenses ... ..	542,030	140,126	197,775	324,364	123,844	1,328,139
Taxation—Income Tax, Pay-roll Tax, License Fees and Stamp Duty ... ..	...	...	...	...	...	882,205
Total Expenditure ... ..	...	...	...	...	...	7,432,545
Year 1944-45.						
Premiums ... ..	£ 3,000,515	£ 872,836	£ 1,102,652	£ †3,112,903	£ 831,183	£ †8,920,089
Interest, Dividends, Rents, etc. ...	...	...	...	...	...	488,061
Total Revenue ... ..	...	...	...	...	...	9,408,150
Claims ... ..	758,856	408,736	563,205	2,294,855	313,128	4,338,780
Contribution to Fire Brigades ...	277,924	...	...	...	...	277,924
Commission and Agents' Charges ...	460,000	58,839	110,877	90,157	124,166	844,039
Management Expenses ... ..	555,434	117,833	198,459	343,379	138,839	1,353,944
Taxation—Income Tax, Pay-roll Tax, License Fees and Stamp Duty ... ..	...	...	...	...	...	1,074,925
Total Expenditure ... ..	...	...	...	...	...	7,889,612
Year 1945-46.						
Premiums ... ..	£ 3,295,535	£ 741,995	£ 1,261,617	£ †3,282,514	£ 927,914	£ †9,509,575
Interest, Dividends, Rents, etc. ...	...	...	...	...	...	503,408
Total Revenue ... ..	...	...	...	...	...	10,012,983
Claims ... ..	850,103	182,411	785,527	2,582,115	328,100	4,728,256
Contribution to Fire Brigades ...	285,133	...	...	...	...	285,133
Commission and Agents' Charges ...	500,148	51,598	122,616	98,677	136,787	909,826
Management Expenses ... ..	610,771	117,195	226,356	369,296	150,511	1,474,129
Taxation—Income Tax, Pay-roll Tax, License Fees and Stamp Duty ... ..	...	...	...	...	...	984,070
Total Expenditure ... ..	...	...	...	...	...	8,381,414

\* Groups as in Table 283. † Under price stabilisation plan the Commonwealth Government assumed part liability for workers' compensation in coal mining and a sum equivalent to Commonwealth's share of claims is included with premiums above.



The income from interest dividends, rents, etc., is derived from investments within the State. Such investments are made from capital funds and reserves accumulated in past years, and these cannot be apportioned equitably over the different States and countries in which the companies operate. The investment income recorded in New South Wales, therefore, does not necessarily represent the amount attributable to general insurance business in New South Wales.

Insurance relating to the liability of employers is compulsory in respect of practically all classes of employees. Details regarding the workers' compensation law and its operation are shown in chapter "Employment" of this Year Book.

The insurance of owners and drivers of motor vehicles against liability resulting from death or bodily injury caused to another person has been compulsory in New South Wales since 1st February, 1943. Only authorised insurers may undertake the compulsory third-party insurance. The form of policy and maximum rates of premium are prescribed. Indemnity provided under the policy is unlimited and it extends to claims made by guest passengers and members of the family of an owner or driver of an insured motor vehicle. Claims for damages in respect of uninsured or unidentified motor vehicles, which cannot be recovered from the owner or driver, are payable from a pool to which authorised insurers are required to contribute in proportion to premium income.

The premium income for marine insurance increased from £498,217 in 1938-39 to £2,088,043 in 1942-43, as a result of higher charges to cover war risks. Then it declined to £1,428,669 in 1943-44, £872,836 in 1944-45 and £741,995 in 1945-46. The decrease was due firstly to diminution in the insurances effected with the insurance companies as a result of the operations of the Commonwealth Marine War Risks Insurance Board (see page 333), and the direct procurement by the Commonwealth Government of an increasing proportion of the goods imported into Australia. Later the war risk rates were reduced.

#### *Government Insurance Office.*

The Government Insurance Office of New South Wales commenced business in July, 1926. It was authorised to undertake workers' compensation insurance for all employers and other classes of general insurance for Government departments, semi-Governmental authorities and Government employees and contractors. In November, 1942, its powers were widened to embrace all classes of general and life insurance—Government and non-Governmental.

The Government Insurance Office is conducted on the mutual principle, profit bonuses being paid to policy holders from available surplus funds. Policies issued by the office are guaranteed by the State.

A summary of the general insurance business transacted in 1944-45 and 1945-46 is shown below.

TABLE 285.—Government Insurance Office, General Insurance Branch, Revenue and Expenditure, 1944-45 and 1945-46.

Particulars.	Year ended 30th June, 1945.					Year ended 30th June, 1946.				
	Workers' Compensation.	Fire.	General Accident.	Marine	Total.	Workers' Compensation.	Fire.	General Accident.	Marine	Total.
	£	£	£	£	£	£	£	£	£	£
Premiums...	313,298	52,583	140,293	5,324	511,498	354,972	62,603	169,162	5,700	592,437
Interest and Other ...	21,509	12,175	7,398	1,102	42,184	24,178	13,503	10,249	1,730	49,660
Revenue ...	334,807	64,758	147,691	6,426	553,682	379,150	76,106	179,411	7,430	642,097
Claims ...	253,966	14,350	86,476	455	355,247	238,741	13,121	113,631	2,470	367,963
Fire Brigade ...	*2,220	3,780	...	...	*6,000	*2,950	2,636	...	...	*5,586
Expenses ...	23,396	11,265	29,219	1,098	64,978	25,960	14,286	32,978	1,240	74,464
Taxation ...	15,794	2,115	12,033	2,981	32,923	41,301	6,981	10,431	1,528	60,241
Expenditure ...	295,376	31,510	127,728	4,534	459,148	308,952	37,024	157,040	5,238	508,254
Surplus ...	30,431	33,248	19,963	1,892	94,534	70,198	39,082	22,371	2,192	133,843

\* Includes contribution to Workers' Compensation Commission £2,220 in 1944-45 and £2,950 in 1945-46.

Premiums for motor vehicle compulsory third party insurances represent approximately 70 per cent. of the total premiums of the General Accident Department.

The total profits amounted to £95,489 in 1944-45, and £133,851 in 1945-46, including surpluses from the realisation of investment securities, etc., £955 and £8 in the respective years. These profits were distributed as follows:—Bonuses to policy holders, £30,830, and £43,890; provision for equalisation of bonuses, £19,000 and £33,000; hospitals account, £25,000 and £36,146, and transfers to reserves, £20,659 and £20,815. The allocation to hospitals was made in terms of the Government Insurance (Amendment) Act, 1941, which provides that funds at the close of each year in excess of the amount determined as reasonably required, are to be paid to the Treasury for use in extending and improving hospital facilities. Such allocations totalled £264,435 to 30th June, 1946.

Assets of the departments transacting general insurance business at 30th June, 1946, amounted to £1,609,120, including Commonwealth securities, £1,101,235, advances to Life Department, £50,000, and balances at State Treasury, £375,400. Accumulated funds in general reserve accounts totalled £605,380, and in bonus equalisation reserve, £88,000.

The life assurance department was established on 16th November, 1942, with funds consisting of £50,000, granted by the State Government, and £50,000 advanced on loan at interest by other departments. Particulars of the operations of the department are shown in the following table.

TABLE 286.—Government Insurance Office, Life Assurance Department,  
year ended 30th June, 1943 to 1946.

Particulars.		1942-43.	1943-44.	1944-45.	1945-46.
Revenue Account—					
Premiums ... ..	£	5,661	39,803	75,268	116,905
Interest ... ..	£	153	2,262	3,467	5,479
Total ... ..	£	5,814	42,065	78,735	122,384
Claims and Surrenders ... ..	£	32	2,923	1,804	5,002
Agency Expenses ... ..	£	1,489	13,385	20,200	22,609
Management ... ..	£	1,723	5,807	7,400	9,235
Total ... ..	£	3,244	22,115	29,404	36,846
Life Assurance Fund* ... ..	£	27,570	47,519	96,851	182,389
New Policies ... ..	No.	337	1,702	2,011	2,207
New Policies Sums Assured ... ..	£	156,412	938,342	1,117,166	1,303,444

\* At 30th June.

*Insurance Against War Damage to Property.*

A scheme for insurance against war damage to property was brought into operation in terms of National Security Regulations issued on 23rd February, 1942. Contributions to the War Damage Fund were payable in respect of two contribution periods, viz., the year 1942 and the two years ended 31st December, 1944. Thereafter free cover was provided against war damage. Details regarding the rates of contribution, etc., were stated at page 467 of the Year Book, 1941-42 and 1942-43.

Income of the War Damage Fund to 30th June, 1946, totalled £16,087,957, including contributions £14,757,959 (approximately £6,000,000 from New South Wales) and interest £1,329,725. Expenditure amounted to £4,750,833; viz., claims, £3,970,810; interest on claims, £293,923; and administration, etc., £486,100. Net assets of the fund amounting to £11,337,124 at 31st December, 1946, were subject to further claims, the probable liability on which was estimated at £5,650,000.

*Marine War Risks Insurance.*

The Commonwealth Marine War Risks Insurance Board, constituted under National Security Regulations in February, 1941, ceased to underwrite insurance risks in September, 1946. It was empowered to provide insurance against war risks in respect of Australian ships, British or Allied ships in Australian waters, liabilities of shipowners to crews arising out of capture or detention by the enemy, personal effects of seamen, cargoes of certain goods specified by order of the Federal Treasurer, and goods transported by sea from one Australian port to another. Receipts of the Board to 30th June, 1946, totalled £7,434,154, including net premiums £7,431,571, and payments amounted to £2,708,937, comprising claims £2,579,261 and administration £129,676. The cash balance held at 30th June, 1946, was £4,725,217.

## BANKRUPTCY.

The Bankruptcy Act, 1924-1945, of the Commonwealth superseded the bankruptcy laws of the States as from 1st August, 1928. Under the Federal law sequestration orders may be made by the Bankruptcy Court on a

bankruptcy petition presented either by a debtor or by a creditor, provided that the aggregate amount of indebtedness is not less than £50. Upon sequestration the property of the bankrupt vests in an official receiver for division amongst the creditors. Provision is made also for compositions and assignments without sequestration and for deeds of arrangement. Details regarding bankruptcy law are contained in the chapter "Law Courts" of this Year Book.

The following statement shows particulars of the bankruptcies (sequestrations, compositions, assignments, and deeds of arrangement) in New South Wales under the Bankruptcy Act of the Commonwealth in 1938-39 and each of the past six years. The records are inclusive of cases in the Australian Capital Territory which for the purposes of the Act is included in the Bankruptcy district of New South Wales:—

TABLE 287.—Bankruptcies in New South Wales, 1939 to 1946.

Particulars.	Year ended 31st July—						
	1939.	1941.	1942.	1943.	1944.	1945.	1946.
<b>Sequestration Orders—</b>							
Number ... ..	277	258	174	116	69	51	49
Liabilities ... .. £	281,280	661,151	138,840	155,889	128,297	49,434	36,866
Assets ... .. £	109,328	204,820	53,732	75,184	45,681	8,255	83,740
<b>Orders for Administration, Deceased Debtors' Estates—</b>							
Number ... ..	18	9	7	13	5	7	2
Liabilities ... .. £	24,920	22,578	38,101	167,439	11,032	42,922	3,861
Assets ... .. £	18,385	15,472	28,245	162,274	7,854	4,888	2,678
<b>Composition and Assignments without Sequestration—</b>							
Number ... ..	4	8	5	1	1	...	2
Liabilities ... .. £	1,402	9,559	8,111	1,382	745	...	2,382
Assets ... .. £	758	2,460	2,511	1,638	152	...	873
<b>Deeds of Arrangement—</b>							
Number ... ..	217	226	135	31	15	8	12
Liabilities ... .. £	377,529	362,027	203,567	49,767	26,775	23,392	20,828
Assets ... .. £	318,932	310,682	195,360	54,525	29,293	20,646	12,553
<b>Total—Number</b> ... ..	516	501	321	161	90	66	65
<b>Liabilities</b> ... .. £	685,131	1,055,315	388,619	374,477	166,849	115,748	63,937
<b>Assets</b> ... .. £	447,403	533,434	279,848	293,621	82,980	33,789	99,844

#### *Debtors Relief (War Time).*

During the war debtors unable to pay debts by reason of circumstances attributable to the war might apply to an appropriate court for relief, in terms of National Security Regulations as described on page 469 of the 1941-42 and 1942-43 edition of the Year Book. These provisions ceased upon termination of the National Security Act on 31st December, 1946.

#### TRANSACTIONS IN REAL ESTATE.

The procedure in regard to land transfers is regulated under the Real Property Act, 1900, and its amendments. The title under this Act, first conferred under the Real Property Act, 1862, is known as "Torrens" title. The main features of the system are transfer of real property by registration of title instead of by deeds, absolute indefeasibility of the title when registered, and protection afforded to owners against possessory claims, as the title under the Act stands good notwithstanding any length of adverse possession. Lands may be placed under the Real Property Act only when

the titles are unexceptionable. All lands alienated by the Crown since the commencement of the Act are subject to the provisions of the Real Property Act, but transactions in respect of earlier grants are governed by the Registration of Deeds Act unless the land has been brought under the operation of the Real Property Act.

The area of Crown grants registered under the Real Property Act and the total consideration expressed in grants in each of the past eight years are shown below, also the area and value of private lands brought under the Act:—

TABLE 288.—Titles granted under Real Property Act, 1939 to 1946.

Year.	Area.			Value.		
	Crown Lands.	Private Lands.	Total.	Crown Lands.	Private Lands.	Total.
	acres.	acres.	acres.	£	£	£
1939 ...	1,153,685	15,871	1,169,556	1,566,130	907,099	2,473,229
1940 ...	1,103,800	6,619	1,110,419	1,497,520	736,692	2,234,212
1941 ...	1,064,419	6,737	1,071,156	1,176,884	826,016	2,002,900
1942 ...	348,441	8,153	356,594	376,355	1,665,907	2,042,262
1943 ...	154,056	4,356	158,412	188,514	802,831	991,345
1944 ...	241,307	26,599	267,906	300,627	1,488,117	1,788,744
1945 ...	204,123	8,499	212,622	287,116	1,399,963	1,687,079
1946 ...	218,341	5,133	223,474	310,806	1,661,678	1,972,484

At the close of 1946 land of an aggregate area of 58,136,902 acres was registered under the Act, the declared value as at date of registration being £145,373,032. The great part of this land consists of Crown grants issued since 1863, and it includes 3,019,768 acres of land originally under the Registration of Deeds Act.

The following table shows for certain years since 1929 the amount paid as money consideration on sales of private real estate, that is, of lands absolutely alienated, together with buildings thereon, with titles registered under the statutes shown. Transfers of conditional purchases and of leases from the Crown are excluded.

TABLE 289.—Real Estate, Conveyances and Transfers, 1929 to 1946.

Year.	Conveyances or Transfers.			Year.	Conveyances or Transfers.		
	Under Registration of Deeds Act.	Under Real Property (Torrens) Act.	Total.		Under Registration of Deeds Act.	Under Real Property (Torrens) Act.	Total.
	£000	£000	£000		£000	£000	£000
1929	9,500	45,100	54,600	1942	4,371	17,237	21,608
1932	2,255	9,987	12,242	1943	2,511	15,031	17,542
1938	6,159	31,260	37,419	1944	3,153	16,309	19,462
1939	4,936	27,221	32,157	1945	4,178	24,115	28,293
1940	4,566	26,487	31,053	1946	7,378	43,299	50,677
1941	4,421	28,822	33,243				

Monthly statistics of sales of real estate are published in the "Monthly Summary of Business Statistics."

Since 20th February, 1942, the Commonwealth Treasurer has exercised control over dealings in real estate in terms of the National Security (Economic Organisation) Regulations, described at the beginning of this chapter.

#### MONEY-LENDERS.

The business of money-lending is regulated by the Money-lenders and Infants Loans Act, 1941, which revised and extended the earlier law on this subject. Money-lenders must obtain a license issued by a court of petty sessions and renewable annually in respect of every address at which they conduct business or have an agency. They must conduct their business only under their own or their firms' names, and at their registered offices. The Act does not apply to licensed pawn-brokers, registered friendly societies, institutions empowered by special Act of Parliament to lend money or banking and insurance companies. The number of money-lenders' licenses in force was 275 at 31st March, 1947.

A money-lender's contract is not enforceable unless it is signed by the borrower and a note of the contract is given to the borrower within a specified time. The note must indicate the date of the making of the loan, the amount of the principal sum, the effective rate of interest charged, and certain other details. The consent of the spouse of a married borrower or guarantor is required in the case of contracts for loans or guarantees for repayment if the amount of the loan exceeds £10. Restrictions are placed upon advertising by money-lenders and powers are conferred on courts to re-open money-lending transactions, and to afford relief to borrowers where interest or charges are excessive or terms are harsh and unconscionable. Where a bill of sale has been given as security to a money-lender he cannot, without leave of a competent court, seize personal chattels such as household effects, tools of trade or wearing apparel.

#### CASH ORDERS.

Cash order traders are subject to the Money-lenders and Infants Loans Act and are required to register as money-lenders. The provisions of the Act were extended to continue on their expiry after the end of 1946 certain of the controls over cash order trading which the Commonwealth had exercised since 27th March, 1942, under war-time regulations.

The maximum amount for which a cash order may be issued is £20 and this is also the maximum which any single person, or husband and wife together, may owe at any time on one or more cash orders. Under the Commonwealth regulations the maximum was £10 from 27th March, 1942, to 31st December, 1946. The Minister has power to limit the volume of business of any cash order trader.

The premium charged for a cash order may not exceed 9d. per £1 and orders must be repayable within twenty weeks. Those accepting cash orders in exchange for goods must present them for redemption within a month; the maximum rate of discount is 10 per cent. if payment is made within fourteen days after the month of presentation or date of delivery of goods; otherwise it is 5 per cent.

The available statistics of cash order trading in New South Wales are given in the following table. The figures for the years 1936 to 1940 are as reported by the Commonwealth Board of Inquiry into Hire Purchase and Cash Order Systems (1941) and those from December quarter, 1945, were supplied by the State Department of Justice. Cash order business is subject to considerable seasonal variation.

TABLE 290.—Cash Orders Issued in New South Wales, 1936 to 1947.

Calendar Year.	Value.	Quarter Ended—	Value
	£		£
1936 ... ..	2,247,938	1945—December ...	615,825
1937 ... ..	2,560,978	1946—March ...	282,356
1938 ... ..	2,684,414	June ...	550,721
1939 ... ..	2,865,831	September ...	453,081
1940 ... ..	2,825,416	December ...	733,832
1946 ... ..	2,019,990	1947—March ...	337,265

#### HIRE-PURCHASE AGREEMENTS.

Hire-purchase agreements in New South Wales are governed comprehensively by the Hire-purchase Agreements Act, 1941-46. As from 1st January, 1947, the law incorporated (with some modifications) certain controls previously exercised in that regard by the Commonwealth under war-time regulations.

On every purchase under such agreements there must be a minimum deposit; for most goods it is 20 per cent. of the purchase price, but in respect of machinery and equipment for primary industries, industrial machinery, motor tractors, gas and electrical appliances, and household appliances operated by other fuels the minimum deposit is 10 per cent.

Agreements must be in writing and must specify certain terms, and the written consent of the purchaser's spouse must be obtained for agreements made by married persons for the purchase of household furniture or effects. Where a vendor re-possesses goods covered by a hire-purchase agreement the total of moneys paid and other consideration provided by the purchaser and the value of the goods at the time of re-possession are set against the purchase price; any excess over the purchase price is recoverable by the purchaser and any deficiency by the vendor. Under certain conditions the purchaser may secure the return of goods re-possessed. Provision is made for the re-opening of agreements on the application of purchaser or guarantor to a competent court.

#### MORTGAGES OF REALTY AND PERSONALTY.

Mortgages other than those regulated by the Merchant Shipping Act may be registered at the Registrar-General's Office, but the number of un-registered mortgages of which records are not obtainable is large.

Real estate mortgages are registered under the Registration of Deeds Act or the Real Property Act, according to the title of the property at the date of mortgage. The consideration stated in the document generally represents the principal owing, but in some cases it stands for the limit within which clients of banks and of other lending institutions are entitled to draw.

Liens on wool, mortgages on live stock, and liens on growing crops are registered under a special Act. Mortgages on live stock are current till discharge, and liens on wool mature at the end of each season, terminating without formal discharge. The duration of liens on agricultural and horticultural produce may not exceed one year.

Mortgages on personalty (other than ships and shipping appliances), wool, live stock and growing crops are registered at the office of the Registrar-General. The registration of a bill of sale must be renewed every five years, and the records are open to the inspection of the public. Information is not readily available to show the total amount of advances made annually on bills of sale.

Mortgages of registered British vessels are arranged under the Imperial Merchant Shipping Act of 1894.

Under National Security (Capital Issues) Regulations the issue of any securities or mortgage or charge on property has been subject to control by the Commonwealth Treasurer as described at page 289.

Particulars of the mortgages of real estate, crops, wool, and live stock in 1929 and 1932 and each of the last eight years are shown below.

TABLE 291.—Mortgages Registered, 1929 to 1946.

Year.	Mortgages of Real Estate.		Mortgages on Crops, Wool, and Live Stock.			
	Number.	Consideration.	Number.			Consideration.
			Crops.	Wool.	Live Stock.	
		£				£
1929	50,841	48,420,657	7,211	3,709	4,481	6,451,596
1932	14,557	8,642,026	10,346	4,773	5,578	8,474,237
1939	31,225	22,443,703	4,662	4,564	4,530	5,979,670
1940	25,298	16,497,222	3,923	4,804	4,107	5,886,844
1941	25,704	15,631,316	4,735	4,581	3,910	5,489,488
1942	13,514	8,007,229	4,019	3,816	2,391	4,517,753
1943	10,689	5,756,174	3,197	3,005	2,272	3,692,181
1944	11,812	6,865,766	2,414	2,393	1,924	2,764,557
1945	17,420	9,750,605	2,132	2,230	2,294	3,064,512
1946	33,548	21,373,572	1,558	1,978	2,648	3,226,514

The amounts shown under the heading "Consideration" include only the cases in which a specific amount is stated in the deeds, whether the amount was actually advanced or not. In many mortgages the amount is omitted and it is probable that the totals shown in the table are understated. Complete records of discharges and foreclosures are not available.

The amount of mortgage registrations as shown in Table 291 comprises first and second mortgages and the registration of collateral securities in respect of subsisting mortgages. A distribution under these headings of mortgages registered during 1939 and each of the last five years is shown below.



TABLE 292.—Mortgages of Real Estate, 1939 to 1946.

Mortgages of Real Estate.	1939.	1942.	1943.	1944.	1945.	1946.
<b>First Mortgages—</b>	£000	£000	£000	£000	£000	£000
Urban Securities ...	13,052	4,854	3,168	2,619	4,848	12,250
Rural ...	3,952	1,219	1,136	2,696	2,842	3,957
Unspecified ...	820	69	68	173	59	585
Total First ...	17,824	6,142	4,372	5,488	7,749	16,792
Collaterals ...	2,293	1,282	1,003	914	1,493	3,536
Second and Other ...	2,326	583	381	464	509	1,045
Total ...	22,443	8,007	5,756	6,866	9,751	21,373

The chief sources of the funds invested on the security of real estate are indicated by the following table in which the first mortgages are grouped according to certain classes of mortgagees, viz., "Government," including State and Federal departments; "banks," including private trading banks, the Commonwealth Bank and Commonwealth Savings Bank and the Rural Bank; "institutions," embracing all other incorporated companies and bodies such as pastoral finance companies, trustee companies, assurance societies, friendly societies and building societies, etc.; and private and other investors.

TABLE 293.—First Mortgages of Real Estate, Classification of Mortgagees, 1939 to 1946.

Year ended 31st December.	Mortgages under Registered First Mortgagees.				
	Government.	Banks. *	Institutions. *	Private and Other.	Total.
	£000	£000	£000	£000	£000
1939 ...	1,525	1,403	10,058	4,838	17,824
1940 ...	985	771	5,733	4,042	11,531
1941 ...	714	1,171	5,378	3,947	11,210
1942 ...	563	527	2,866	2,186	6,142
1943 ...	454	680	1,551	1,687	4,372
1944 ...	473	1,593	1,355	2,067	5,488
1945 ...	600	1,866	2,673	2,610	7,749
1946 ...	1,050	3,988	6,836	4,918	16,792

\* These do not represent the total amount lent, as many of the mortgages are fluctuating overdrafts, the amount of which is not stated.

The trend of interest rates on loans secured by the mortgage of real estate is shown in Table 266.

## MORATORIUM, 1930.

The rights of mortgagees have been restricted since December, 1930, by the operation of a moratorium. Bankers' liens and liens on crops and wool do not come within its scope, nor do mortgages executed in favour of a building society or the Crown, except those under the Returned Soldiers Settlement Act or in favour of the Commissioners of the Rural Bank of New South Wales. Hire-purchase agreements and judgment debts are subject to special provisions. The moratorium extends to mortgages executed before or after the commencement of the moratorium, unless specially excluded by agreement in the prescribed form.

Without leave of the Court, a mortgagee may not exercise any of his rights for the recovery of money, or for the enforcement or realisation of the security. The mortgagee is not precluded from entering into possession without an order of the Court, if interest or rates and taxes are in arrears for at least two years, or if there has been default in insurance or maintenance, or if the mortgagor abandons possession or comes under the influence of the bankruptcy laws or their equivalent; but in any such case the mortgagor may apply within three months to the Court for an order directing the mortgagee to vacate possession.

In the case of mortgages of real estate, the moratorium extends to interest payments, and the mortgagee can exercise his right to sue only if the mortgagor relinquishes his right to protection or comes within the influence of the laws relating to bankruptcy.

The due date for payment of principal moneys has been extended to the day of the month in 1951 corresponding to the day of the month specified in the mortgage, or to 28th February, 1951, if payable on demand. The court may grant a further extension upon the application of a mortgagor.

#### ESTATES OF DECEASED PERSONS.

The following table shows the number of estates and the value as assessed for probate duty in New South Wales in each of the last ten years, including intestate and other estates administered by the Public Trustee:—

TABLE 294.—Estates of Deceased Persons.

Year ended 30th June.	Estates.	Amount.	Year ended 30th June.	Estates.	Amount.
	No.	£		No.	£
1937	9,420	23,194,706	1942	11,588	26,158,401
1938	9,904	25,776,575	1943	12,479	27,286,958
1939	10,668	26,202,317	1944	13,590	28,351,563
1940	10,828	26,598,763	1945	13,321	29,199,113
1941	11,438	24,782,013	1946	13,411	29,955,967

In accordance with the provisions of the Stamp Duties Act the estates are deemed to include all the property of the deceased persons which is situated in New South Wales, including property which, within three years prior to death, was transferred as a gift, or vested in a private company or trust in consideration of shares or other interest, and moneys payable under life assurance policies, etc. In the case of deceased persons domiciled in New South Wales at death, the estates include also personal property outside New South Wales.

An indication of the proportionate distribution of wealth may be gained from an analysis of the value of the estates of deceased persons, and in the following statement the estates on which probate was granted during the ten years ended 30th June, 1946, have been graded according to value:—

TABLE 295.—Estates of Deceased Persons, Ten Years ended June, 1946.  
Classified according to Value.

Value of Estate.	Number of Deceased Persons leaving Property.	Value of Estates of Deceased Persons.	Proportion in each Group.	
			Number.	Value.
		£	Per cent.	Per cent.
Under £1,001 ... ..	76,487	29,898,366	65·57	11·18
£1,001 to £5,000 ... ..	29,211	66,290,204	25·04	24·78
£5,001 to £12,000 ... ..	6,958	52,921,879	5·97	19·78
£12,001 to £25,000 ... ..	2,608	44,236,233	2·23	16·54
£25,001 to £50,000 ... ..	990	33,987,438	0·85	12·70
Over £50,000 ... ..	393	40,172,256	0·34	15·02
Total ... ..	116,647	267,506,376	100·00	100·00

The average value per estate during the period was £2,293, but of the property-owners who died 65 per cent. possessed less than £1,000, the total value of their property being 11·2 per cent. of the aggregate. More than 44 per cent. of the property devised was contained in 3·4 per cent. of the estates.

## LOCAL GOVERNMENT:

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The basis of the existing system of Local Government in New South Wales was established by Acts passed in 1905 and 1906, and a consolidating law, the Local Government Act, 1919, with subsequent amendments and comprehensive ordinances, constitutes the present-day charter of Local Government in the State.

The civic affairs of the City of Sydney, which was first constituted by statute in 1842, are governed by a special Act—the Sydney Corporation Act. The City of Greater Newcastle, which ranks second in importance, is subject to the general provisions of the Local Government Act, though constituted with certain additional powers by special Act in 1938, as described on page 525 of the 1939-40 issue of the Year Book.

There are a number of supplementary statutes relating to water supply, sewerage, gas and electricity services, and main roads, as well as a Valuation of Land Act.

### LOCAL GOVERNMENT BODIES.

Local Government extends over the whole of the Eastern and Central land divisions of New South Wales, comprising almost three-fifths of its total area. The sparsely populated Western Division contains six municipalities and part of another municipality, but the remainder of the division is not incorporated. The area and population of these districts are shown in the chapter "Population" of this Year Book.

There are two main kinds of local government areas, viz., municipalities and shires. The municipality, the earlier form of incorporation, is usually a centre of population, smaller in extent than a shire. The shires are for the most part country areas embracing tracts of rural lands as well as one or more towns or villages.

There were 193 municipalities when shires, numbering 134, were first incorporated in 1906. Fluctuations in the numbers resulted from the constitution of new areas and amalgamation of existing areas from time to time, and at the end of 1930 there were 181 municipalities and 138 shires, a net decrease of 8 in the total number. More recently policy has favoured the consolidation of local government units and the total decreased by 23 between 1930 and 1940 and by a further 7 to the end of 1946. At this date there were 152 municipalities and 137 shires.

The principal groups of Local Government bodies at the end of 1946 were as follows:—

*The City of Sydney*, embracing five square miles containing the principal commercial parts of the metropolis and abutting on Sydney Cove and Darling Harbour.

*The City of Greater Newcastle*, 38 square miles in area, covering an area which prior to 1938 was incorporated as the City of Newcastle, ten suburban municipalities and parts of two shires.

*Municipalities* (excluding the cities of Sydney and Greater Newcastle), of which 48 are suburbs of Sydney and 102 are in the country. The suburban municipalities cover an area of 240 square miles, and the country municipalities, which include most of the principal towns of the State, 1,755 square miles.

*Shires* (137 in number, with an area of 181,987 square miles) consist mainly of smaller urban areas and extensive rural lands, but include some large towns not incorporated as municipalities. The shires range in area from 49 square miles (Woy Woy) to 5,883 square miles (Lachlan).

*County Councils*, of which there are sixteen, are combinations of municipalities and shires for the administration of certain specified local services of common benefit.

#### SYSTEM OF LOCAL GOVERNMENT.

Each municipality and shire is governed by a council elected for a term of three years. The Council of the City of Sydney is composed of twenty aldermen, four for each of five wards. The Council of Greater Newcastle consists of twenty-one aldermen, three representing each of its seven wards.

All other municipal councils must consist of not less than six nor more than fifteen aldermen, and the shire councils of not less than six nor more than nine councillors, each riding being represented by an equal number of councillors.

Each municipal council elects annually a mayor, and each shire council a president, from amongst its members.

The right to be enrolled as an elector in a municipality or a shire extends to adult British subjects qualified as owners or rate-paying lessees of ratable land, or as occupiers of land.

The qualification as occupier is held by persons who have been continuously for three months in occupation of ratable land (a) by virtue of a miners' right or business license under the Mining Act, or (b) as direct tenant of the owners or rate-paying lessees where the yearly value of the land is not less than £5. If not enrolled under either of these qualifications, a person is entitled to enrolment as occupier in a ward or riding if he is enrolled on the Parliamentary electoral roll and his place of living as there stated is in the ward or riding.

Persons may be enrolled and may vote in respect of each ward or riding in which they are qualified as owners or as rate-paying lessees, but not more than once in respect of the same ward or riding. A person qualified as owner or as rate-paying lessee in a ward or riding who is qualified also as an occupier in another ward or riding of the same municipality or shire may not be enrolled under both qualifications. A person qualified as occupier in more than one ward or riding may be enrolled in one only.

Unless disqualified by the Sydney Corporation or Local Government Act, any person qualified to vote is qualified for a civic office.

In the shires, urban areas may be established upon proclamation by the Governor if the majority of the electors in the locality favour the project. In such cases the council of the shire exercises within each urban area the powers of the council of a municipality. Except in the shires of Hornsby,

Sutherland, and Warringah, urban committees may be appointed to exercise within the urban areas certain powers of the council, and to expend money raised by a local rate levied by the council upon the request of the urban committee. In March, 1946, there were 31 such committees.

Provision is made for joint action by local governing bodies in regard to undertakings of magnitude or those which benefit more than one area. For such purposes county councils may be constituted, or joint committees may be arranged under the ordinances.

There were sixteen County Councils at the end of 1946. Three were formed to administer water supply, viz., the Central Tablelands, Northern Riverina and Rous, and eight were constituted to conduct electricity undertakings, viz., Sydney, St. George, Clarence River, Bega Valley, Brisbane Water, Oxley, North West, and Richmond River. The Southern Riverina County Council administers both electricity and water supply services, and the Blue Mountains County Council is empowered to conduct electricity, gas, water and sewerage undertakings and transport services, to advertise for the purpose of attracting tourists and settlers, and to erect dwellings, shops and other buildings for sale or lease. The Cumberland County Council was established to prepare a scheme of town planning, the Richmond River County Council for the eradication of the water hyacinth pest and the Eastern Riverina County Council for the destruction of noxious weeds.

In some cases boards or trusts have been constituted under special Acts to conduct operations which are regarded usually as belonging to the sphere of local government. A brief description of their activities is given later.

#### *Town and Country Planning.*

Legislation providing the basis for an active and co-ordinated system of town planning was enacted in 1945. Municipal and shire councils, singly or in groups, aided by qualified advisors, may undertake the preparation of plans and must do so when directed by the Minister. A Town and Country Planning Committee of eight members has been appointed to advise the Minister and may assist councils. Plans prepared by councils must be referred to the Committee for report and may not be put into operation until approved by the Minister. The Cumberland County Council has been constituted to prepare a general plan to govern the planning and developmental activities of the 61 municipalities, including the City of Sydney and 8 shires, constituting the county district. Councils may impose a betterment charge on ratable land equal to 80 per cent. of the increase in its value by reason of a town planning scheme.

#### *Statistics of Local Government.*

Statistics of Local Government bodies are compiled in the Bureau of Statistics and Economics from statements of accounts and returns furnished by the local councils. These accounts and returns are kept in prescribed form and relate to the year ended 31st December.

As a rule, summarised statistics become available about sixteen months after the end of the year to which the accounts relate, but during the war it was necessary to suspend much of the compilation. Apart from data relating to valuations, rating and indebtedness, the year 1944 is, therefore, the first since 1939 in respect of which statistics of Local Government finances are as yet available.

## EXTENT OF LOCAL GOVERNMENT.

The aggregate extent of the local government areas in New South Wales is about 184,000 square miles, or nearly 60 per cent. of the total area of the State.

The area, population and value of ratable property in the incorporated areas as at 31st December, 1944, were as stated below:—

TABLE 296.—Municipalities and Shires, Area, Population and Value of Ratable Property, 1944.

Local Areas.	Area.	Population. §	Unimproved Capital Value. *	Improved Capital Value. *	Assessed Annual Value. *
	acres.	No.	£	£	£
City of Sydney... ..	3,220	95,925	50,293,601	174,178,160	7,883,466
Suburban Municipalities	151,283	1,375,113	107,939,132	356,391,879	28,933,269
Total, Metropolitan	154,503	1,471,038	158,232,733	530,570,039	36,816,735
City of Greater Newcastle ... ..	24,238	127,138	8,932,166	30,763,979	2,525,302
Country— Municipalities ... ..	1,125,625	547,784	28,686,326	108,657,060	8,897,832
Shires ... ..	116,471,769	816,769	148,891,120	339,200,000†	†
Total Country ... ..	117,597,394	1,364,553	177,577,446	447,857,060†	†
Total Municipalities and Shires ... ..	117,776,135	2,962,729	344,742,345	1,009,191,078 ‡	†

\* Excluding non-ratable properties (see page 347). † Not available. ‡ Estimated.  
§ At Census 30th June, 1947.

The area of the shires as shown above is exclusive of 28 square miles of Federal Territory at Jervis Bay, and the Australian Capital Territory, containing an area of 911 square miles.

Many shires do not assess improved capital value or assessed annual value for rating purposes, and the improved capital value of ratable lands within such shires is estimated (by reference to various data) at approximately twice the unimproved capital value.

A general summary of the finances of municipalities, shires and county councils in 1944 is shown in the following table. Explanations and other details of the finances are shown later, viz., revenue accounts, pages 354 to 366, and loan accounts, pages 368 to 371.

TABLE 297.—Local Government, N.S.W., Summary of Finances, 1944.

Particulars.	Municipalities and Shires.			County Councils. *	Total.
	Sydney and Suburbs.	Greater Newcastle.	Country.		
Revenue—	£	£	£	£	£
Ordinary Services ...	4,344,526	349,571	4,321,798	.....	9,015,895
Electricity and Gas ...	169,047	697,111	2,296,912	4,650,459	7,813,529
Water and Sewerage ...	.....	.....	845,288	49,656	894,944
Abattoirs ...	.....	565,592	49,083	.....	614,675
Total Revenue ...	4,513,573	1,612,274	7,513,081	4,700,115	18,339,043
Expenditure—					
Ordinary Services ...	4,138,639	360,721	4,456,647	.....	8,956,007
Electricity and Gas ...	156,079	652,607	2,065,309	4,561,745	7,435,740
Water and Sewerage ...	.....	.....	755,655	38,546	794,201
Abattoirs ...	.....	530,775	45,162	.....	575,937
Total Expenditure ...	4,294,718	1,544,103	7,322,773	4,600,291	17,761,885
Loan Expenditure†—					
Ordinary Services ...	26,253	22,207	50,784	.....	99,244
Trading Undertakings ...	1,217	57,907	262,453	97,603	419,180
Net Long Term Debt†—					
Ordinary Services ...	8,892,376	674,452	2,117,947	.....	11,684,775
Trading Undertakings ...	48,846	433,056	7,430,924	13,756,945	21,669,771

\* Including Grafton and South Grafton Water Board. † Comprises loans, repayable Government advances and time-payment debts. Net debt is principal outstanding at 31st December, less accumulated sinking fund.

#### VALUATION OF PROPERTY IN LOCAL AREAS.

Local governing bodies obtain a large amount of revenue from the taxation which they are empowered to levy upon unimproved or improved values of land, principally from an annual levy on unimproved capital value.

The valuations are made at intervals not exceeding three years. The valuations of the City of Sydney are made by a City Valuer who is a salaried officer of the City Council. The Valuer-General, appointed in terms of the Valuation of Land Act, 1916, assesses values within the other municipalities, the shires situated wholly or partly within the county of Cumberland and the Blue Mountains Shire. In other shires the council may decide whether the valuation is to be made by the Valuer-General or by its own valuers.

At the end of 1946 the valuations in force in 104 municipalities and 46 shires were made by the Valuer-General, and in 48 municipalities and 89 shires by valuers appointed by the councils. In two shires the valuations were made partly by the Valuer-General and partly by the council's valuers.



In municipalities the valuation must show the unimproved capital value, the improved capital value, and the assessed annual value of ratable property. In the shires the law requires the valuation of the unimproved capital value only and the determination of the improved capital value and the assessed annual value is optional, except in urban areas, in which the assessed annual value must be determined. The Valuer-General usually determines improved values and assessed annual values for all lands in shires within his jurisdiction.

The unimproved capital value is defined as the amount for which the *fee-simple* estate in land could be sold under such reasonable conditions as a *bona-fide* seller would require assuming that the actual improvements had not been made. For purposes of rating, however, the unimproved capital value of Crown lands occupied as pastoral or agricultural holdings is twenty times the rent payable to the Crown during the year preceding the assessment. After the expiry of ten years of the term of leases, lands leased from the Crown with right of conversion to freehold are rated on thirty times the annual rental paid.

Alternatively a council may direct that the unimproved capital value of mines be ascertained upon the basis of output as indicated at page 482 of the 1941-42 and 1942-43 edition of the Year Book.

The improved capital value is the amount for which the *fee-simple* estate of the land, with all improvements and buildings thereon, could be sold.

The assessed annual value is nine-tenths of the fair average rental of land, with improvements thereon, but must not be less than 5 per cent. of the improved capital value.

All lands are ratable except the following, viz., lands belonging to the Commonwealth Government; lands belonging to the State Government and statutory bodies, unless leased for private purposes or used in connection with a State industrial undertaking; lands vested in the Crown or public body or trustees and used for public cemeteries, commons, reserves or free libraries; lands vested in and used by the University of Sydney or any of its colleges; lands belonging to and used for public hospitals, benevolent institutions or charities; lands belonging to and used by religious bodies for public worship, religious teaching or training, or solely for the residence of the official heads or clergymen; lands belonging to and used for schools registered under the Bursary Endowment Act or certified under the Public Instruction Act, including playgrounds and residences occupied by caretakers, servants and teachers.

Where water is supplied or sewerage or drainage services are rendered, a charge or fee may be imposed in respect of properties thus exempted from rating. The underground mains of the gas and hydraulic power companies are ratable, and in respect of some of its properties the Commonwealth Government makes a contribution to councils' funds in lieu of rates.

In the following table are shown the aggregate valuations used for assessing rates on ratable property and the value of improvements in local government areas in the year 1944. Where the improved capital value of country shires is not recorded it is estimated that, in the aggregate, the value of improvements is approximately equal to the unimproved value.

TABLE 298.—Municipalities and Shires, Ratable Property, Unimproved Value, and Value of Improvements, 1944.

Division.	Unimproved Value of Ratable Land.		Value of Improvements on Ratable Land.	
	Total.	Average Per acre.	Total.	Average Per acre.
	£000	£ s.	£000	£ s.
City of Sydney ... ..	50,294	15,619 3	123,884	38,473 10
Suburban Municipalities ... ..	107,939	713 10	248,453	1,642 6
Total Metropolitan ... ..	158,233	1,024 3	372,337	2,409 18
City of Greater Newcastle ... ..	8,932	368 10	21,832	900 15
Country—				
Municipalities ... ..	28,686	25 10	79,972	71 1
Shires ... ..	148,891	1 6	*190,309	1 13
Total Incorporated Areas... ..	344,742	2 19	*664,450	5 13

\* Estimated.

Lands leased from the Crown and assessed on a capitalised rental basis are included above at such capitalised value.

The unincorporated portion of the Western Division contains about 80,000,000 acres, which are for the most part pastoral or agricultural lands held under lease from the Crown at annual rentals. The unimproved capital value of these leaseholds assessed at twenty times the annual rent payable to the Crown would not exceed £3,000,000.

A comparative summary of the unimproved and improved capital values and the assessed annual value of ratable property, excluding lands coming within the exemptions noted above, is shown in the following statement:—

TABLE 299.—Municipalities and Shires, Valuations of Ratable Property, 1921 to 1945.

At 31st December.	Metropolitan Area.			City of Greater Newcastle.	Country.		Total.
	City of Sydney.	Suburban Municipal- ities.	Total Metro- politan.		Municipal- ities.	Shires.	
	£000	£000	£000	£000	£000	£000	£000
Unimproved Capital Value.							
1921	35,887	57,291	93,178	6,040	20,965	128,273	248,456
1931	56,961	118,250	175,211	9,972	30,814	162,740	378,737
1936	45,799	90,367	136,166	7,379	23,658	139,213	306,416
1939	47,766	98,655	146,421	8,356	27,377	143,882	326,036
1941	50,349	104,869	155,218	8,596	28,200	146,850	338,864
1942	50,427	106,586	157,013	8,641	28,425	148,163	342,242
1943	50,321	107,501	157,822	8,952	28,436	148,114	343,324
1944	50,294	107,939	158,233	8,932	28,686	148,891	344,742
1945	50,286	108,792	159,078	8,943	28,903	149,524	346,448
Improved Capital Value.							
1921	99,647	156,849	256,496	15,450	59,115	*	*
1931	192,194	334,391	526,585	27,817	103,736	*	*
1936	139,818	275,031	414,849	22,327	84,479	*	*
1939	155,776	300,724	456,500	25,371	97,629	*	*
1941	173,547	325,587	499,134	28,587	102,245	*	*
1942	174,760	331,520	506,280	28,724	103,305	*	*
1943	174,878	347,489	522,367	30,749	105,397	*	*
1944	174,178	356,392	530,570	30,764	108,658	*	*
1945	174,972	363,751	538,723	30,723	109,775	*	*
Assessed Annual Value.							
1921	4,484	11,038	15,522	982	4,373	*	*
1931	8,253	25,690	33,943	2,099	8,178	*	*
1936	6,292	19,873	26,165	1,670	6,590	*	*
1939	7,010	23,149	30,159	2,058	7,697	*	*
1941	7,810	25,910	33,720	2,321	8,252	*	*
1942	7,864	27,319	35,183	2,330	8,538	*	*
1943	7,870	28,495	36,365	2,525	8,654	*	*
1944	7,884	28,933	36,817	2,525	8,898	*	*
1945	7,874	29,458	37,332	2,519	9,012	*	*

\* Not available.

Valuations are made usually at triennial intervals, and the values shown above do not indicate the annual changes in the value of real property, but rather the trend over a longer period.

The decline after 1931 was due in part to the exclusion from valuation lists of a large number of Crown and other properties which were exempted from rating in 1932. Since 1942 movements in the valuations have been regulated largely by the system of land sales control exercised by the Commonwealth Government under National Security Regulations.

The ratio of assessed annual value to improved capital value in 1945 was 4.5 per cent. in the City of Sydney, 8.1 per cent. in the suburbs, 8.2 per cent. in Newcastle and 8.2 per cent. in country municipalities. As the assessed annual value is nine-tenths of the actual annual value, the proportions per cent. of annual value to improved value were 5 per cent., 9.0 per cent., 9.1 per cent., and 9.1 per cent., respectively.

It is the practice in the City of Sydney to derive the aggregate improved capital value of properties by capitalising the fair average rental at 5 per cent. For this reason the ratio of the assessed annual to the capital values of city properties is lower than the ratios for properties in suburban and country municipalities.

Variations in value of improvements in municipalities ascertained by deducting the unimproved from the improved values are indicated hereunder:—

TABLE 300.—Municipalities, Ratable Property, Value of Improvements, 1921 to 1945.

Areas.	Value of Improvements on Ratable Lands.						
	1921.	1931.	1939.	1941.	1943.	1944.	1945.
Metropolitan—	£000	£000	£000	£000	£000	£000	£000
City of Sydney ...	63,760	135,233	108,010	123,198	124,557	123,884	124,686
Suburban ...	99,558	216,141	202,069	220,718	239,988	248,453	254,959
Total Metropolitan ...	163,318	351,374	310,079	343,916	364,545	372,337	379,645
City of Greater New-castle.	9,410	17,845	17,015	19,990	21,797	21,832	21,780
Country Municipalities	38,150	72,922	70,252	74,044	76,961	79,972	80,872
Total Municipalities ...	210,878	442,141	397,346	437,950	463,303	474,141	482,297

#### RATING BY LOCAL GOVERNING BODIES.

The City of Sydney, the municipalities and shires operating under the Local Government Act, and special boards constituted to administer water, sewerage and drainage works levy rates within the areas served by them. The amount of rates levied by the councils and the boards during the years 1941 to 1945 is shown in Tables 197 and 198 of this Year Book, where local rating is considered conjointly with other forms of taxation imposed in the State.

Levies by councils include rates for general, special and local purposes, for the payment of interest and instalments of principal on loans and contributions to the Government on account of main roads. The following table shows the total amount of such rates levied by the City of Sydney and other municipalities and the shires in various years since 1921 according to the purposes for which the rates were levied; *i.e.*, ordinary services, trading, and water and sewerage undertakings. In the rates for ordinary services are included rates levied for the purposes of the general fund, and special and local rates imposed in relation to functions which are similar to those of the general fund; *e.g.*, roads, health, street lighting, etc.

TABLE 301.—Municipalities, Shires and County Councils, Rates Levied, 1921 to 1945.

Year.	Rates Levied.					
	Ordinary Services.	Electricity Fund.	Gas Works Fund.	Water Supply Fund.	Sewerage Fund.	Total.
	£	£	£	£	£	£
1921	3,464,565	23,535	4,698	117,077	36,305	3,646,180
1931	5,815,792	86,326	4,631	257,536	81,955	6,246,240
1936	4,969,623	47,732	2,526	266,595	109,786	5,396,262
1939	5,558,528	35,147	2,469	301,492	173,189	6,070,825
1941	5,796,255	33,030	2,866	318,675	203,097	6,353,923
1942	5,864,778	38,045	2,193	327,728	207,388	6,440,132
1943	5,902,497	38,430	2,277	334,431	207,807	6,485,442
1944	5,914,529	39,734	2,233	332,237	208,981	6,497,714
1945	6,063,511	37,818	2,204	340,364	214,987	6,658,884

The amount of rates levied in various groups of local areas, viz., the City of Sydney, the suburban and country municipalities and county councils is shown in later tables.

*City of Sydney—Rating.*

The Sydney Corporation Act prescribes that the City Council must levy in each year a general rate of not less than one penny in the £ on the unimproved capital value. The Council may levy also a city rate not exceeding 2s. in the £ on the assessed annual value. The limit of rating is fixed by the amount which would be yielded by a rate of 3d. in the £ on the unimproved capital value and a rate of 2s. in the £ on the assessed annual value. Where a city rate is not levied, the maximum rate is 6d. in the £ on the unimproved capital value.

Rates in respect of the Sydney Harbour Bridge were first levied in 1923 and rates on account of contributions to the funds of the Main Roads Department in 1925. Both these rates were abolished at the end of 1937.

The following table shows the rates struck and the total amounts levied by the City Council in various years since 1921.

TABLE 302.—City of Sydney, Rates Levied, 1921 to 1945.

Year.	City Fund.		Main Roads Rates.	Harbour Bridge Rates.	Total Rates Levied.
	Rate struck in the £ on U.C.V.	Total Amount Levied.			
	pence.	£	£	£	£
1921... ..	5	750,742	...	...	750,742
1931... ..	3½	890,697	59,273	118,888	1,068,858
1936... ..	4½	856,438	41,636	42,278	940,352
1939... ..	4 <sup>27</sup> / <sub>32</sub>	958,652	...	...	958,652
1941... ..	4 <sup>27</sup> / <sub>32</sub>	1,013,181	...	...	1,013,181
1942... ..	4 <sup>27</sup> / <sub>32</sub>	1,012,495	...	...	1,012,495
1943... ..	4 <sup>27</sup> / <sub>32</sub>	1,012,730	...	...	1,012,730
1944... ..	4 <sup>27</sup> / <sub>32</sub>	1,011,982	...	...	1,011,982
1945... ..	4 <sup>27</sup> / <sub>32</sub>	1,010,590	...	...	1,010,590

The City Fund rate levied in the years 1946 and 1947 was 5½d. in the £ on the unimproved capital value.

*Rating under Local Government Act.*

Suburban and country municipalities and shires may levy rates of four kinds, viz., general, special, local, and loan rates, and some of them may be required to levy special rates in respect of main roads.

Certain limitations as to minimum general rates and maximum amounts which may be levied in a municipality or shire are imposed by the Local Government Act. These are described in the 1939-40 issue of the Year Book on page 533.

The general rate in municipalities has been levied on the unimproved capital value since 1908, and, with few minor exceptions, the unimproved capital value forms the basis on which special, local and loan rates are levied. In shires the rates are levied upon the unimproved capital value except in a few cases where a small special rate has been imposed on the improved value.

The following table shows for various years since 1908 the amount of rates levied for all purposes in the municipalities, shires and county councils operating under the Local Government Act.

TABLE 303.—Municipalities, Shires and County Councils (Excluding City of Sydney), Rates Levied, 1908 to 1945.

Year.	Suburbs of Sydney.	City of Greater Newcastle.	Country.			Total.
			Municipalities	Shires.	County Councils.	
	£	£	£	£	£	£
1908 ... ..	356,413	37,922	230,814	364,284	...	989,433
1921 ... ..	1,187,648	113,107	602,154	987,219	5,310	2,895,438
1931 ... ..	2,497,057	198,066	1,056,566	1,420,061	5,632	5,177,382
1936 ... ..	1,994,540	170,522	954,151	1,330,420	6,277	4,455,910
1939 ... ..	2,228,194	189,012	1,147,079	1,539,281	8,607	5,112,173
1941 ... ..	2,331,259	195,926	1,197,908	1,604,778	10,871	5,340,742
1942 ... ..	2,381,369	195,518	1,217,883	1,620,327	12,540	5,427,637
1943 ... ..	2,432,660	204,542	1,218,227	1,602,698	14,585	5,472,712
1944 ... ..	2,359,684	238,999	1,228,207	1,642,468	16,374	5,485,732
1945 ... ..	2,411,684	241,691	1,255,868	1,676,014	63,037	5,648,294

Included in the above rates are local and loan rates for the purposes of trading and water and sewerage undertakings, which in 1944 amounted to £583,185 and in 1945 to £595,373. The balance of the rates was used for ordinary services and consisted of general rates, viz., £4,314,312 in 1944 and £4,457,798 in 1945, and special local and loan rates, £588,235 in 1944 and £595,123 in 1945.

General rates are levied on all ratable lands within a municipal or shire area, but other rates, imposed to meet local or special needs, frequently apply to only portion of an area. In 1945 the general rates amounted to £2,192,859 or 91 per cent. of the total rates for ordinary services in the suburbs of Sydney, £241,691 or 100 per cent. in Newcastle, £699,760 or 85 per cent. in country municipalities and £1,323,488 or 84 per cent. in the shires.

The following table shows the average rate levied per £ of unimproved capital value for ordinary services in groups of municipalities and shires at intervals since 1908. These averages are based upon the aggregate unimproved value of ratable land within each group and the amount of rates

levied—whether they were general over the whole municipality or shire or applied only to part thereof. Rates levied for trading, water and sewerage funds are excluded.

TABLE 304.—Municipalities and Shires, Average Rate Levied for Ordinary Services per £ of Unimproved Capital Value, 1908 to 1945. (Excluding City of Sydney.)

Year.			Suburbs of Sydney.	City of Greater Newcastle.	Country.		Total.
					Municipalities.	Shires.	
			d.	d.	d.	d.	d.
1908	...	...	3.34	2.88	2.66	1.08	1.76
1921	...	...	4.98	4.49	4.90	1.84	3.06
1931	...	...	5.05	4.77	5.46	2.01	3.54
1936	...	...	5.29	5.55	5.97	2.20	3.71
1939	...	...	5.42	5.43	6.32	2.44	3.97
1940	...	...	5.33	5.47	6.17	2.47	3.96
1941	...	...	5.33	5.47	6.39	2.46	3.98
1942	...	...	5.36	5.43	6.45	2.29	3.91
1943	...	...	5.43	5.48	6.40	2.42	4.01
1944	...	...	5.24	6.42	6.51	2.46	4.00
1945	...	...	5.32	6.49	6.85	2.53	4.09

The amount of rates levied, as shown in Table 303, represents the amount taken to account by councils as revenue, after deductions from current assessments in respect of reductions of valuations on appeal and amounts written off as irrecoverable. Generally most of the rates are collected in the year of levy, but there was a large accumulation of arrears between 1929 and 1934. Though the amount has since decreased steadily, as shown by the following table, the arrears at the end of 1945 were equivalent to 30 per cent. of the rates levied in that year.

TABLE 305.—Municipalities, Shires and County Councils, Overdue Rates and Extra Charges, 1921 to 1945. (Excluding City of Sydney.)

At 31st December.			Suburbs of Sydney.	City of Greater Newcastle.	Country.			Total.
					Municipalities	Shires.	County Councils.	
			£	£	£	£	£	£
1921	...	...	113,342	7,261	136,888	101,287	538	359,316
1929	...	...	218,935	18,776	222,711	271,375	376	732,173
1934	...	...	1,052,823	68,845	662,114	834,804	1,533	2,620,119
1939	...	...	704,976	40,311	633,965	824,696	2,056	2,206,004
1944	...	...	511,234	19,963	576,791	745,054	3,982	1,857,024
1945	...	...	451,023	17,739	526,546	684,369	38,484	1,718,161

For purposes of comparison, the amounts in country municipalities, shires and county councils should be combined because there have been amalgamations of areas with consequent transfer of overdue rates and charges as between these groups.

*Main Roads and Harbour Bridge Rates.*

In terms of the Main Roads Act the councils of municipalities and shires, except the City of Sydney which was exempted at the end of the year 1937, may be required to contribute towards the cost of main roads which are under the control of the Department of Main Roads. For the purpose of the contributions the councils in the metropolitan road district levy a rate and pay the proceeds to the Department. The contribution by the various councils is calculated at a uniform rate on the unimproved capital value of ratable property in the areas, as fixed by the Department of Main Roads. The rate may not exceed  $\frac{1}{4}$ d. in the £ on ratable property and the rate on farming lands may be reduced to one-half of the rate on other lands. During the years 1925 to 1932 the ordinary rate was  $\frac{1}{4}$ d. in the £ and the rate on farming lands was  $\frac{1}{8}$ d., and these were reduced in 1933 to  $\frac{7}{16}$ d. and  $\frac{7}{32}$ d., respectively.

Contributions by country councils are based upon the amount actually expended on main roads and are allocated to the individual councils according to the benefit each derives from the road works. The maximum contribution by a country council in any year is the sum which would be produced by a rate of  $\frac{1}{2}$ d. in the £ on the unimproved capital value of ratable lands.

The Sydney Harbour Bridge rate payable by the City of Sydney and seven municipalities and one shire on the northern side of the harbour was abolished at the end of 1937.

Revenue to meet these contributions was derived by councils either by the levy of a special rate or by provision in the general rate and is included in the particulars of rates shown in preceding pages. The amounts shown in the following table represent the contributions actually payable to the Main Roads and Harbour Bridge Funds; those for main roads include only a very small amount in respect of country councils.

TABLE 306.—Municipalities and Shires, Contributions to Main Roads and Harbour Bridge, 1931 to 1944.

Year.	Contributions by Municipalities (including City of Sydney) and Shires for—		
	Main Roads.	Sydney Harbour Bridge.	Total.
	£	£	£
1931 ... ..	344,187	186,639	530,826
1936 ... ..	231,870	64,644	296,514
1937 ... ..	239,834	62,705	302,539
1938 ... ..	198,974	341	199,315
1939 ... ..	205,585	195	205,780
1944 ... ..	223,659	...	223,659

REVENUE FINANCES OF LOCAL GOVERNING BODIES.

The accounts of municipal, shire and county councils in New South Wales are on an income and expenditure basis, and show the income accrued and expenditure incurred during the period to which they relate.



The form of accounts to be used by all councils, except the City of Sydney and the Sydney County Council, is prescribed under the Local Government Act. In each area there must be (a) a general fund, to which must be credited all moneys receivable in respect of the general rate, loans raised for any general purpose and loan rates levied in respect thereof, and moneys receivable in respect of any matter not appertaining to another fund; (b) a special fund for each special rate levied; (c) a local fund for each local rate levied; and (d) a separate trading fund for each trading undertaking conducted by the council. The resources of the general fund may be applied to any general purposes throughout the area, such as administration, health, roads, parks, etc., and the payment of interest and principal of loans, but the resources of a special or a local fund may be expended only on the special purpose or in the specified area in respect of which the rate is levied.

The rates and other revenue of the Municipality of Sydney are paid into and its expenses are defrayed out of the City Fund, in terms of the Sydney Corporation Act. Separate accounts are kept in respect of public markets and resumptions of land, but these are subsidiary to the City Fund and are incorporated in it. Conditions governing the accounts of the Sydney County Council are contained in the Gas and Electricity Act.

An attempt has been made, as shown below, to compile tables of the revenue accounts of all municipal, shire and county councils on a simplified and uniform basis.

*Ordinary Services Revenue Accounts.*

The functions of local government embraced by the term "Ordinary Services" are those which come within the scope of the City Fund of the Municipal Council of Sydney and the general fund of the councils under the Local Government Act, including special and local funds relating to works and services of a character similar to those covered by the general fund. The trading, water and sewerage funds are excluded, particulars of these being shown in Tables 312 to 319.

A summary of the revenue and expenditure from revenue on account of ordinary services in the years 1936 to 1939 and in 1944 is shown below:—

TABLE 307.—Local Government, N.S.W.—Ordinary Services, Revenue and Expenditure from Revenue, 1936 to 1944.

Year.	Metropolitan.		City of Greater Newcastle.	Country.		Total, New South Wales.
	City of Sydney.	Suburban Municipal- ities.		Municipal- ities.	Shires.	
	£	£	£	£	£	£
Revenue.						
1936 ... ..	1,300,317	3,619,509	514,135	1,802,412	4,017,744	11,254,117
1937 ... ..	1,312,221	3,245,813	429,928	1,543,267	4,008,471	10,539,700
1938 ... ..	1,331,433	3,186,743	349,378	1,640,892	4,148,963	10,657,409
1939 ... ..	1,318,047	3,392,192	368,328	1,593,499	4,005,625	10,677,691
1944 ... ..	1,426,554	2,917,972	349,571	1,283,060	3,038,738	9,015,895
Expenditure from Revenue.						
1936 ... ..	1,360,739	3,662,181	505,600	1,826,137	3,999,574	11,354,231
1937 ... ..	1,349,739	3,325,736	417,899	1,582,256	4,016,820	10,692,450
1938 ... ..	1,316,313	3,294,869	417,022	1,639,586	4,122,483	10,790,273
1939 ... ..	1,344,448	3,400,955	384,634	1,566,528	3,959,150	10,655,715
1944 ... ..	1,340,516	2,798,123	360,721	1,305,560	3,151,087	8,956,007

*Ordinary Services Revenue.*

Rates form the largest item of revenue in respect of ordinary services and (with interest on overdue rates) represented 78 per cent. of the revenue of the councils, excluding receipts from Government, and 66 per cent. of the total revenue during 1944.

The chief items of ordinary services revenue in the years 1936 to 1939, and in 1944, are shown below.

TABLE 308.—Local Government, N.S.W.—Ordinary Services,  
Dissection of Revenue, 1936 to 1944.

Year.	Revenue Raised by Councils.					Amounts Received from Government.	Total Revenue..
	Rates and Interest on Overdue Rates.	Sanitary and Garbage.	Contributions to Works.	Property (Rents, Charges).	Other.		
	£	£	£	£	£	£	£
1936 ...	5,088,782	458,365	224,280	298,250	531,403	4,653,037	11,254,117
1937 ...	5,198,219	454,107	327,293	283,710	574,333	3,702,038	10,539,700
1938 ...	5,410,665	455,871	339,927	315,804	622,834	3,512,308	10,657,409
1939 ...	5,661,128	462,270	304,584	317,309	572,218	3,360,182	10,677,691
1944 ...	5,989,175	577,003	111,522	389,740	623,727	1,324,728	9,015,895

Particulars of ordinary services revenue in 1944 are shown in greater detail in Table 309.

Until 1939 the councils received large sums from the Government for expenditure on unemployment relief works and as contributions towards the cost of extensive programmes of loan works. Government grants for these purposes and for the construction and maintenance of main roads then declined with the diversion of resources to war activities.

Receipts from the Government in 1939 included £1,371,526 obtained from the Main Roads Department and the amount in 1944 was £880,045. Of these disbursements for main roads, the shires received £1,115,344 in 1939 and £781,031 in 1944.

In the metropolitan area and Newcastle amounts received from the Government represented only 14 per cent. in 1939, and 3 per cent. in 1944, of the total revenue from all sources. In country municipalities the proportions were 30 per cent. and 8 per cent., and in the shires 54 per cent. and 35 per cent. respectively. In the aggregate Government payments to councils represented 31 per cent. of their revenue in 1939 and 15 per cent. in 1944.

TABLE 309.—Local Government, N.S.W.—Ordinary Services Revenue, 1944.

Revenue.	Metropolitan.		City of Greater Newcastle	Country.		Total.
	City of Sydney.	Suburban Municipalities.		Municipalities.	Shires.	
	£	£	£	£	£	£
General Rates ... ..	1,011,982	2,139,065	238,999	655,182	1,281,066	5,326,294
Loan, Local and Special Rates ... ..	...	218,742	...	123,270	246,223	588,235
Extra Charges on Overdue Rates ... ..	1,157	23,842	1,269	21,493	26,885	74,646
Total Rates and Extra Charges ... ..	1,013,139	2,381,649	240,268	799,945	1,554,174	5,989,175
Miscellaneous Licence Fees—Charges for Gas, Electric, Hydraulic Mains, etc.	26,461	10,431	1,620	10,862	17,082	66,456
Sales and Charges for Services, etc.—						
Contributions to Works ... ..	18,873	49,754	7,160	15,865	19,870	111,522
Sanitary and Garbage Services ... ..	50,671	129,600	7,055	196,485	193,192	577,003
Parks, Reserves, Baths and Beaches ... ..	7,140	71,669	1,638	33,013	16,024	129,484
Public Markets ... ..	114,781	...	...	21,123	3,679	139,583
Council Property ... ..	179,617	41,925	53,560	42,624	72,014	389,740
Other ... ..	13,978	106,397	14,841	54,668	98,320	288,204
Total Sales and Charges ... ..	385,060	399,345	84,254	363,778	403,099	1,635,536
Total Revenue Raised by Councils ... ..	1,424,660	2,791,425	326,142	1,174,585	1,974,355	7,691,167
Government Grants—						
Endowment ... ..	...	...	...	...	178,188	178,188
Main Roads Dept. ... ..	...	37,416	5,484	56,114	781,031	880,045
Subsidy for Payment of Interest and Principal on Loans ... ..	...	13,355	2,385	4,934	7,861	28,535
Other ... ..	1,894	75,776	15,560	47,427	97,303	237,960
Total Government Grants ... ..	1,894	126,547	23,429	108,475	1,064,383	1,324,728
Total Revenue on Account of Ordinary Services ... ..	1,426,554	2,917,972	349,571	1,283,060	3,038,738	9,015,895

*Ordinary Services Expenditure.*

Particulars of expenditure on ordinary services, as shown in this chapter, are not presented in the same form as in accounts furnished by the councils which are subject to administration in terms of the Local Government Act (*i.e.*, all councils except the City of Sydney).

The councils statements are composite in character and show in combination expenditure from both revenue and loans. In this chapter expenditure from each source is shown separately—expenditure from revenue in Tables 310 and 311 and expenditure from loans in Tables 322 to 324. In the dissection of the accounts a degree of approximation was necessary in some instances, but the final results may be regarded as reliable statements of the expenditure by the local governing bodies on ordinary or general services.

A summary of the annual expenditure from revenue on ordinary services as shown in the following table, is divided into two parts, *viz.*, (i) *Gross Expenditure*, being expenditure from revenue derived from all sources, *i.e.*, revenue raised by the councils and Government grants towards the cost of councils' services and for main roads, unemployment relief and national works undertaken by councils for the Government; (ii) *Net Expenditure*, which represents expenditure from councils' own revenue; it has been ascertained by deducting from *Gross Expenditure* the amounts received from the Government as shown in Table 308.

TABLE 310.—Local Government, N.S.W., Ordinary Services,  
Gross and Net Expenditure from Revenue, 1936 to 1944.

Year.	Gross Expenditure.*				Net Expenditure.*		
	Administra- tion, Works and Services.	Debt Services.		Total Gross Expenditure. ★	Administra- tion, Works and Services.	Interest and Debt Redemption.	Total Net Expenditure. ★
		Interest.	Provision for Debt. Redemption.				
	£	£	£	£	£	£	£
1936	9,633,387	835,617	885,227	11,354,231	5,075,717	1,625,477	6,701,194
1937	8,901,161	814,517	976,772	10,692,450	5,327,325	1,663,087	6,990,412
1938	8,794,729	877,590	1,117,954	10,790,273	5,479,657	1,798,308	7,277,965
1939	8,628,976	891,339	1,135,400	10,655,715	5,467,908	1,827,625	7,295,533
1944	7,227,463	715,125	1,013,419	8,956,007	5,946,281	1,684,998	7,631,279

★ See explanation in context preceding table.

Expenditure on interest relates to amounts payable on overdrafts, fixed loans, deferred or time payment debts, repayable Government advances and other liabilities. In the accounts of the City of Sydney, the charge is ascertained after deducting from the total amount payable, interest earnings on a considerable body of investments not being part of normal sinking funds.

Amounts shown as provision for debt redemption (*i.e.*, loans, repayable Government advances and deferred or time payment debts) do not embrace all moneys devoted to such purpose. For instance earnings on sinking fund investments in the City of Sydney are credited direct to sinking fund accounts and proceeds of the sale of valuable resumption residues are invested and held for redemption purposes apart from the revenue account. A complete statement of amounts provided for debt redemption from all sources is shown in Table 323.

Councils receive relatively small grants from the Government in respect of interest and repayment of loans raised by councils for main roads and for supplementing Government expenditure on relief work. Such grants amounted to £43,546 in 1944.

The net cost of debt service borne by the councils represented 22 per cent. of the total net expenditure on ordinary services in 1944. The ratio was 42 per cent. in the City of Sydney, 31 per cent. in Greater Newcastle, 23 per cent. in the suburbs of Sydney, 13 per cent. in country municipalities and 12 per cent. in shires.

Particulars of gross expenditure on ordinary services in 1944 are shown in Table 311. A similar statement regarding net expenditure has not been compiled because complete details are not available as to the objects on which moneys received from the Government were expended. A charge made for depreciation and included in the individual items of expenditure is deducted as a single amount from total expenditure on works and services. This is done in order to remove duplication which arises from the inclusion in expenditure of (1) purchase of assets from revenue and depreciation of those assets, (2) repayment of loans expended on the purchase of assets and depreciation of the assets.

TABLE 311.—Local Government, N.S.W., Ordinary Services,  
Gross Expenditure from Revenue, 1944.

Expenditure.	Metropolitan.		City of Greater Newcastle.	Country.		Total.
	City of Sydney.	Suburbs of Sydney.		Municipalities.	Shires.	
Works and Services—	£	£	£	£	£	£
Administration ... ..	85,620	217,185	26,029	129,096	280,789	738,719
Works—Roads, Streets, Bridges, etc.	119,733	741,873	93,719	441,366	1,994,125	3,390,816
Street Lighting ... ..	31,077	174,374	20,497	75,788	64,800	366,536
Sanitary and Garbage ... ..	145,689	308,615	34,877	191,344	194,456	874,981
Parks, Reserves, Baths and Beaches...	54,638	192,880	31,290	104,663	48,800	432,271
Health Supervision ... ..	24,149	53,528	7,050	33,497	37,328	155,561
Public Markets ... ..	65,769	...	...	17,582	3,695	87,046
Noxious Animals and Weeds Destruction ... ..	...	964	...	3,289	24,487	28,740
Fire Prevention ... ..	23,339	84,693	7,989	17,852	15,463	149,336
Donations to Hospitals, Charities, Bands and Public Bodies ...	500	14,069	1,646	8,623	7,077	31,915
Council Property, including new Plant, Machinery, etc. ... ..	92,119	130,998	20,318	82,806	146,443	472,684
Contributions to Main Roads Dept...	...	196,314	...	7,952	19,393	223,659
Other ... ..	136,291	109,427	19,596	72,827	122,005	460,146
Total Works and Services ... ..	778,924	2,224,920	263,020	1,186,685	2,958,861	7,412,410
Less Depreciation ... ..	...	50,479	9,702	43,688	75,078	184,947
	778,924	2,168,441	253,318	1,142,997	2,883,783	7,227,463
Debt Charges—						
Interest on Loans, Deferred Debts, Repayable advances from Government and Overdraft ...	418,672	147,905	30,377	43,364	74,717	715,125
Repayment of Loans, Deferred Debts, Government Advances, including Contributions to Sinking Funds...	142,020	481,687	77,026	119,199	192,587	1,013,419
Total Debt Charges ... ..	561,592	629,682	107,403	162,563	267,304	1,728,544
Total Expenditure from Revenue	1,340,516	2,798,123	360,721	1,305,560	3,151,087	8,956,007

*Electricity Trading Funds.*

In New South Wales establishments for the supply of electricity for public and private use are conducted by municipal and shire councils and county councils formed by groups of municipalities and shires for this purpose. A number of the larger councils and some situated in remote parts of the State have works for the generation as well as the distribution of electricity; other councils purchase supplies in bulk and distribute them to consumers.

In 1944 electricity services were provided by 82 municipalities, 36 shires and 7 county councils. Of these, 22 municipalities, 9 shires and 4 county councils operated generating plants, 57 municipalities, 27 shires and 2 county councils distributed current purchased in bulk, and 3 municipalities and 1 county council generated a quantity of electricity but purchased substantial supplies from other sources.

The largest undertaking is that of the Sydney County Council, which in 1944 distributed electricity direct to consumers in the city and thirty-two suburban municipalities. It also supplied electricity in bulk to the local councils of ten municipalities and four shires for distribution in their respective localities, and to a private company for distribution within a municipality and a shire.

The St. George County Council purchases from the Commissioner for Railways bulk supplies of electricity which are sold for street lighting and to private consumers in the suburban municipalities of Bexley, Hurstville,

Kogarah and Rockdale. The Clarence River County Council has constructed hydro-electric works on the Nymboida River. The Bega Valley County Council is developing a hydro-electric scheme on the South Coast. Other county councils conducting electricity undertakings in 1944 were Brisbane Water, Oxley and Southern Riverina, and operations were commenced subsequently by Blue Mountains, North West and Richmond River.

A statement of the revenue and expenditure of the electricity concerns of the local governing authorities in 1944 is shown below:—

TABLE 312.—Local Government, N.S.W., Electricity Works, Revenue Accounts, 1944.

Particulars.	Municipalities.		Shires.	County Councils.			Total.
	Greater New-castle.	Other.		Sydney.	St. George.	Other.	
<i>Revenue.</i>	£	£	£	£	£	£	£
Electricity Sales ... ..	644,526	1,543,768	485,162	4,044,964	249,170	248,543	7,216,133
Meter Rent, Installations, etc. ...	52,585	154,519	55,058	78,535	3,964	25,283	369,944
Loan Rates ... ..	...	10,868	28,866	...	...	...	39,734
Total Revenue ... ..	697,111	1,709,155	569,086	4,123,499	253,134	273,826	7,625,811
<i>Expenditure.</i>							
Cost of Electricity and Distribution ... ..	617,062	1,447,307	458,065	4,012,897	228,260	244,484	7,008,075
Street Lighting Attendance, etc. ... ..	35,545	98,173	31,493	60,218	4,241	11,645	241,315
Total Expenditure ... ..	652,607	1,545,480	489,558	4,073,115	232,501	256,129	7,249,390
Trading Surplus ... ..	44,504	163,675	79,528	50,384	20,633	17,697	376,421

The net trading profit in 1944 was £376,421, and most of the undertakings disclosed a profit. The exceptions were one county council, 9 municipalities and 2 electricity funds in the shires, some of which operate more than one fund. The aggregate amount of the trading losses was £1,649 in the county council, £23,075 in the municipalities and £1,079 in the shires.

The foregoing results were realised after charging as costs of electricity and distribution £942,466 for interest on loans, overdrafts, etc., and exchange thereon and £1,247,719 for depreciation and obsolescence of assets. Included in the item other revenue is an amount of £17,944, representing grants received from the State Government; viz., municipalities, £8,690, shires £4,963, and county councils £4,291. Such grants are usually made to promote the extension of electricity services in rural areas and in some instances take the form of an annual subsidy towards the interest and repayment charges on loans.

The electricity undertakings of the councils expend large sums annually in the replacement, improvement and extension of plant and equipment and in the repayment of capital indebtedness, for which purposes funds are obtained from loans, moneys reserved to provide for depreciation and trading surpluses. A dissection of these capital transactions in 1944 is as follows:—

	County Councils.	Municipalities.	Shires.	Total.
Capital Expenditure—	£	£	£	£
From Loans ... ..	74,080	202,975	8,189	285,244
Other ... ..	624,627	178,853	44,716	848,196
Total ... ..	698,707	381,828	52,905	1,133,440
Provision for Debt Redemption ...	453,965	111,552	46,781	612,298

The growth of the combined municipal, shire and county councils electricity enterprises is illustrated by the following table which shows the number of councils engaged and a summary of their revenue accounts at intervals between 1921 and 1944.

TABLE 313.—Local Government, N.S.W., Electricity Works.  
Revenue Accounts, 1921 to 1944.

Year.	No. of Councils.	Expenditure.	Revenue.				Trading Surplus.
			Sales.	Loan Rates.	Other.	Total.	
		£	£	£	£	£	£
1921	...	35	1,171,064	1,109,548	24,435	53,175	1,187,158
1931	...	111	3,751,004	3,502,547	86,385	146,407	3,735,339
1936	...	113	4,135,728	4,233,520	47,732	160,224	4,441,476
1937	...	118	4,528,825	4,601,029	44,851	187,387	4,833,267
1938	...	121	4,922,637	4,972,361	46,769	249,372	5,268,502
1939	...	122	5,338,943	5,362,395	35,147	293,041	5,690,583
1944	...	125	7,249,390	7,216,133	39,734	369,944	7,625,811

(-) Deficiency.

The quantity of electricity generated by the local government undertakings in 1944 was 1,134,706,000 units representing approximately 40 per cent. of the total output of all generating stations in New South Wales. In addition the councils purchased electricity which increased their supplies by a net amount of 404,161,000 units.

The following table shows the electricity generated, purchased and sold by the various groups of councils in 1944:—

TABLE 314.—Local Government, N.S.W., Electricity Generated,  
Purchased and Sold, 1944.

Council.					Units Generated.	Units Purchased.	Units Sold.
County Councils—							
Sydney	...	...	...	...	1,043,859,500	...	893,467,000
St. George	...	...	...	...	...	49,154,200	43,352,030
Clarence River	...	...	...	...	33,966,005	...	27,634,953
Bega Valley	...	...	...	...	942,955	...	731,839
Brisbane Water	...	...	...	...	...	7,611,200	6,087,258
Southern Riverina	...	...	...	...	85,790	400,895	371,938
Oxley	...	...	...	...	747,181	...	536,346
Municipalities	...	...	...	...	52,567,468	365,183,827	381,936,729
Shires	...	...	...	...	2,536,803	74,885,824	69,397,835
Gross Total					1,134,705,702	497,235,946	1,423,515,928
Less purchases between councils					...	93,075,294	93,075,294
Net Total					1,134,705,702	404,160,652	1,330,440,634

The electricity used in power stations, etc., and lost in transformation and transmission in 1944 was 208,426,000 units, or 13 per cent. of the electricity generated and purchased.

The cost of generation, purchase and distribution of electricity in 1944 was £7,008,075, or 1.18d. per unit sold, and the average price realised for electricity sold was 1.22d.

The following summary of the balance sheets of the electricity undertakings of municipal, shire and county councils shows the extent of capital investment and loan debt outstanding at 31st December, 1944:—

TABLE 315.—Local Government, N.S.W., Electricity Works,  
Balance Sheets, 1944.

Particulars.	Municipalities.		Shires.	County Councils.			Total.
	Greater New-castle.	Other.		Sydney.	St. George.	Other.	
<i>Liabilities.</i>	£	£	£	£	£	£	£
Loan Debt ...	313,971	776,509	426,437	15,922,822	195,513	997,506	18,632,758
Overdrafts ...	...	94,145	40,490	11,966	...	55,807	202,408
Creditors, etc. ...	66,493	161,662	42,790	1,586,202	42,779	49,678	1,949,694
Total Liabilities ...	380,464	1,032,316	509,717	17,521,080	238,292	1,102,991	20,784,860
<i>Assets.</i>							
Land, plant, etc. ...	1,097,911	2,747,402	1,123,618	16,040,125	573,218	1,013,181	22,595,455
Debtors, etc. ...	69,548	350,897	118,634	553,749	27,830	64,129	1,184,787
Bank and cash ...	55,564	245,649	89,624	37,729	8,979	62,211	499,756
Fixed deposits and investments ...	83,065	398,312	85,063	5,767,859	89,920	99,400	6,523,619
Total Assets ...	1,306,088	3,742,260	1,416,939	22,399,462	699,947	1,238,921	30,803,617
Excess of Assets ...	925,624	2,709,944	907,222	4,878,382	461,655	135,930	10,018,757

There was a surplus of assets over liabilities in all undertakings except in three municipalities, two funds in the shires, and two county councils, in which the aggregate excess of liabilities was £43,218.

The surplus funds of the Sydney County Council included the following reserves: General, £229,358, Sinking Fund, £3,896,923, and Insurance Fund, £236,223. The value of plant, etc., included capitalised charges for loan discounts and flotation expenses, £195,357, which are written off by annual charges to revenue. The gross value of land, plant, etc., with stores on hand, amounted to £25,897,029, being reduced to £16,040,125 by the deduction of depreciation reserve £9,856,904.

#### *Gasworks Trading Funds.*

The supply of coal gas for lighting and heating in New South Wales is mainly the province of private companies.



The gasworks operated by municipal councils are situated in country towns; they numbered 21 in 1921, 18 in 1939, and 19 in 1944. A summary of their revenue accounts in various years since 1921 is shown below:—

TABLE 316.—Local Government, N.S.W., Gasworks Revenue Accounts, 1921 to 1944.

Year ended 31st December.	Expenditure.		Revenue.					Surplus or Deficiency (—)
	Cost of Gas and Residuals.	'Total Expendi- ture.	Sales.		Loan Rates.	Other.	Total.	
			Gas.	Residuals.				
	£	£	£	£	£	£	£	£
1921 ...	139,466	145,261	135,629	12,534	4,698	4,646	157,507	12,246
1931 ...	103,814	106,317	90,332	13,419	4,631	3,376	111,758	5,441
1936 ...	88,493	89,181	71,549	12,954	2,526	4,298	91,327	2,146
1937 ...	91,321	92,087	71,522	13,959	2,864	8,699	97,044	4,957
1938 ...	95,006	95,708	74,106	14,388	2,401	3,049	93,944	(—)1,764
1939 ...	96,702	97,316	75,075	13,681	2,469	5,028	96,253	(—)1,063
1944 ...	181,433	186,350	137,872	35,871	2,233	11,742	187,718	1,368

Profits on trading aggregating £8,453, were earned by 9 of the municipal undertakings in 1944, trading losses aggregating £7,085 were incurred by 9 of them, and in one undertaking revenue equalled expenditure. Costs of manufacture included £16,080 for depreciation of assets and £2,271 for interest on loans, overdrafts, etc. The revenue included votes from electricity funds, £4,196, and a grant from the State Government, £200.

The gas manufactured in 1944 measured 477,942,000 cubic feet and the average cost, after deducting proceeds from the sale of residuals, was 6s. 1d. per 1,000 cubic feet. Of 380,342,000 cubic feet of gas sold, 374,520,000 cubic feet were for private consumption and 5,822,000 cubic feet for public lighting, etc. The average price realised was 7s. 4d. per 1,000 cubic feet of gas sold.

The balance sheets of the municipal gasworks trading undertakings at 31st December, 1944, are summarised in the following statement:—

TABLE 317.—Local Government, N.S.W., Gasworks Balance Sheets, 1944.

Liabilities.				Assets.			
			£				£
Loans and deferred payment debts			74,454	Buildings, land, stock, plant, etc.			353,274
Sundry creditors, etc. ...			32,004	Sundry debtors, including amounts due from other funds ...		25,234	
Overdrafts ...			31,313	Outstanding rates...		1,235	
Total Liabilities ...			137,771	Fixed deposits and investments...		11,416	
Excess of Assets ...			266,651	Bank balance and cash ...		13,263	
Total ...			£404,422	Total ...			£404,422

A surplus of assets at the end of 1944 was disclosed by all but two undertakings in which the deficiencies totalled £6,191. Capital expenditure on the improvement and extension of assets during 1944 amounted to £45,373, including £29,725 from loan funds, of which £24,600 was expended in acquiring an existing undertaking from a private company. Repayments of capital debt (loans and deferred debts) totalled £4,476.

#### *Water Supply and Sewerage Funds.*

The water supply and sewerage systems of the metropolitan and Newcastle districts and Broken Hill are administered by statutory boards, representative of the State Government and the local councils, and several water storage systems are under direct Government control. The larger systems are described on page 374 *et seq.* The Grafton and South Grafton Water Board administers water supply services within the municipalities of Grafton and South Grafton.

At the end of 1944 five county councils had been created with authority to supply water to towns in constituent municipalities and shires; viz., Southern Riverina and Northern Riverina formed in 1938, Rous in 1940, and Central Tablelands and Blue Mountains in 1944. Only one county council, Blue Mountains, was empowered to conduct a sewerage system. Other domestic water supply and sewerage works in New South Wales, except those associated with irrigation schemes, are vested in municipal and shire councils.

Until 1935 the water and sewerage works, as a general rule, were constructed by the State, and transferred on completion to the local councils, which were required to repay the capital cost, with interest, over periods fixed in relation to the durability of the works. Since 1935 the construction of new works has, in many instances, been undertaken by the councils from loans raised for the purpose, with the State bearing portion of the capital cost. On many of the loans raised by the councils the State pays part of the annual charges.

Existing arrangements between the State Government and councils for the repayment of the cost of works constructed by the State were modified when the Country Towns Water Supply and Sewerage (Debts) Act was passed in 1937. The Act expired on 30th June, 1940. By its terms provision was made for writing off part of the indebtedness to the State, and the councils were authorised to raise loans to repay the remainder. The sum of £806,656 was written off and £3,279,388 accepted by the State in full settlement of the debts, amounting in the aggregate to £4,086,044.

At 31st December, 1944, country water supply services were conducted or were under construction by seventy-six municipalities, forty-four shires and four county councils, and country sewerage services by fifty-three municipalities and eleven shires.

The following table is a summary of the revenue accounts of the undertakings for the year, 1944:—

TABLE 318.—Local Government, N.S.W., Water and Sewerage, Revenue Accounts, 1944.

Councils.	Expenditure.	Revenue.				Surplus.
		Rates.	Government Grants.	Sales and Other.	Total.	
Water Supply.						
	£	£	£	£	£	£
Municipalities ... ..	394,482	246,804	33,928	170,695	451,427	56,945
Shires ... ..	113,100	69,059	10,936	44,049	124,044	10,944
County Councils* ... ..	38,546	16,374	15,720	17,562	49,656	11,110
Total Water Supply...	546,128	332,237	60,584	232,306	625,127	78,999
Sewerage.						
	£	£	£	£	£	£
Municipalities ... ..	227,790	191,727	26,523	29,311	247,561	19,771
Shires ... ..	20,283	17,254	3,276	1,726	22,256	1,973
Total Sewerage ... ..	248,073	208,981	29,799	31,037	269,817	21,744

\* Including Grafton and South Grafton Water Board.

Expenditure relates to management and working expenses, depreciation and interest. In water supply works the charge for depreciation was £57,268 and interest amounted to £177,341, including £15,602 payable on debt owing to the Government. For sewerage works the depreciation was £24,831, and interest £115,095, including £3,043, on debt to the Government.

Particulars of capital expenditure from loan, depreciation and surplus funds, and of redemptions of capital indebtedness during 1944, are shown below:—

Service.	Capital Expenditure.			Debt Redemption.
	From Loans.	Other.	Total.	
	£	£	£	£
Water Supply—				
Municipalities ... ..	8,124	46,920	55,044	43,088
Shires ... ..	12,366	6,834	19,200	15,169
County Councils ... ..	23,523	941	24,464	7,296
Total ... ..	44,013	54,695	98,703	65,553
Sewerage—				
Municipalities ... ..	9,540	8,731	18,271	31,969
Shires ... ..	1,341	925	2,266	3,633
Total ... ..	10,881	9,656	20,537	35,602

The capital debts of the water supply undertakings aggregated £4,265,076 at 31st December, 1944, viz., municipalities £2,906,816, shires £820,234 and county councils £538,026. An amount of £2,658,878 for sewerage works consisted of £2,446,010 owing by the municipalities and £212,668 by the shires. The combined capital debts of the water and sewerage works was represented by loans £6,261,864, Government advances £631,680, time payment contracts £5,153 and debts to other funds £25,057.

#### *Abattoir Trading Funds.*

The Local Government Act authorises the councils of municipalities and shires, other than those in areas under the jurisdiction of the Meat Industry Act (see chapter Food and Prices) to conduct abattoirs. This power was exercised by only five municipalities at the end of 1944. At Newcastle the abattoirs have been controlled by the municipal council since 1939; previously they were conducted by an independent board.

A statement of the revenue and expenditure of the municipal abattoirs in 1944 is shown below—

TABLE 319.—Local Government, N.S.W., Abattoirs Revenue Accounts, 1944.

Municipality.	Expenditure.	Revenue.			Surplus.
		Sales, Dues, etc.	Other.	Total.	
	£	£	£	£	£
Albury ... ..	3,995	4,543	94	4,637	642
Broken Hill ... ..	6,502	5,937	*832	6,769	267
Maitland ... ..	25,567	27,338	785	28,123	2,556
Newcastle ... ..	530,775	563,597	1,995	565,592	34,817
Tamworth ... ..	9,098	9,454	100	9,554	456
Total ... ..	575,937	610,869	3,806	614,675	38,738

\* Includes Government Grant, £736.

The expenditure includes charges for interest £5,941 and depreciation of assets £10,998.

Capital expenditure amounted to £49,551 in 1944, of which £40,685 was financed from loans and £8,000 from interfund borrowing. Redemptions of capital indebtedness totalled £10,102.

Assets valued at £443,559 at 31st December, 1944, included premises, plant, stores £348,558, and exceeded liabilities by £243,664. The excess of assets in the Newcastle abattoirs was £221,262.

The liabilities included capital indebtedness; viz., loans £148,371 and amounts owing to other funds £9,600.

#### FINANCIAL ASSISTANCE RECEIVED FROM GOVERNMENT.

The central Government of the State affords financial assistance to the local governing bodies by supplementing general revenues and contributing to the cost of specified works and services. Assistance to general revenues is paid to shires only in the form of endowment in which individual

shires participate according to an apportionment made by the Government in every third year. The matters to be taken into account in making the apportionment are specified in the Local Government Act, *e.g.*, the necessity for developing new districts, the extent to which the council and the people of the areas concerned undertake to share in the development by constructing works or paying local rates, the rate levied and its relation to the maximum rate.

The amount of endowment distributable annually was £177,500 from 1937 to 1945 and it was fixed at £179,750 for the years 1946 to 1948.

In addition to endowment, grants by the State are made to municipalities and shires for specific purposes. Large sums have been paid to councils which act as construction authorities or agents for the State in such matters as maintenance and construction of main roads and unemployment relief works.

In regard to measures for the relief of unemployment, assistance has been given to the councils in terms of the Local Government (Further Amendment) Act, 1935, to enable them to undertake the construction of works and the provision of services which would otherwise be beyond their financial resources. By the Act the Treasurer was authorised, until 30th June, 1940, to make agreements with the councils for State contributions towards interest and sinking fund charges in respect of loans raised by them and to make advances to supplement loans raised by councils.

Moneys paid to local governing bodies for any of the abovementioned purposes are included in the following statement of funds provided by the State or Commonwealth Government and expended by councils at intervals between 1921 and 1944.

TABLE 320.—Local Government, N.S.W., Receipts from State Government,\* 1921 to 1944.

Year.	Sydney and Suburbs.	Newcastle.	Country Municipalities.	Shires.	County Councils.	Total.
	£	£	£	£	£	£
1921 ... ..	29,344	2,030	25,864	331,173	...	388,411
1931 ... ..	197,604	11,276	142,900	828,828	...	1,180,608
1936 ... ..	1,135,263	268,853	902,063	2,399,043	800	4,706,022
1937 ... ..	682,418	146,792	678,434	2,349,583	926	3,858,153
1938 ... ..	543,475	69,120	907,288	2,439,849	1,962	3,961,694
1939 ... ..	631,278	96,723	768,009	2,244,106	5,832	3,745,948
1944 ... ..	133,080	23,429	174,031	1,083,558	20,630	1,434,728

\* Including amounts to be disbursed by councils as agents for the Government.

A classification of moneys paid by the Government to local governing bodies, showing broadly the objects of expenditure, is given below. Unemployment relief moneys form the largest constituent of those classified as

other ordinary services up to 1939. A large proportion of such moneys was spent on road works and smaller sums on parks, baths, beaches and other services. Payments to water supply and sewerage funds include substantial contributions towards the capital cost of new works.

TABLE 321.—Local Government, N.S.W., Receipts from State Government\* Objects, 1931 to 1944.

Year.	Ordinary Services.			Trading Funds.		Total
	Endowment.	Main Roads.	Other.	Electricity, Gas and Abattoirs.	Water and Sewerage.	
	£	£	£	£	£	£
1931 ... ..	149,533	1,028,486		312	2,277	1,180,608
1936 ... ..	149,875	1,664,365	3,439,597	5,033	47,152	4,706,022
1937 ... ..	175,425	1,313,912	2,213,627	2,949	152,240	3,858,153
1938 ... ..	177,950	1,380,348	1,954,384	10,705	438,307	3,961,694
1939 ... ..	177,500	1,371,526	1,811,156	18,761	367,005	3,745,948
1944 ... ..	178,188	880,045	267,114	18,880	90,501	1,434,728

\* Including amounts paid to councils for disbursement as agents for the Government.

#### LOAN FINANCES OF LOCAL GOVERNING BODIES.

Long term borrowing by local governing bodies in New South Wales is classified for statistical purposes under three headings: (i) *Loans*, i.e., amounts raised by the sale of debentures and inscribed stock to private individuals and financial institutions, mostly banks and life assurance societies; (ii) *Government Advances*, comprising repayable advances in cash and the cost of works and services performed or materials supplied by the State for which councils are liable; and (iii) *Time Payment Debts*, known also as deferred payment debts, relating generally to plant and property acquired by hire purchase and sometimes to work performed under terms of extended payment.

#### *Borrowing Powers.*

The Sydney Corporation Act authorises the Council of the City of Sydney, with the Governor's approval, to raise loans in Australia or any other country by the issue of debentures or inscribed stock secured upon the corporate rates and revenues of the Council from whatever source arising. The currency of a loan, including renewals thereof, may not exceed 50 years in the aggregate and repayment may be made by equal yearly or half-yearly instalments of principal and interest or through the operation of a sinking fund established on the basis of 3 per cent. per annum compound interest. The council may not exceed by way of overdraft an amount equal to one-half of the revenue, as certified by the Auditor-General, of the fund to which the overdraft relates.

Loans obtained by the councils of other municipalities and of shires are raised usually under the Local Government Act, 1919, and its amendments.

In respect of municipal loans, the Local Government Act prescribes that a council may not borrow any moneys which, with existing loans, will cause the total indebtedness to exceed 20 per cent. of the unimproved value of ratable land in the area. It is provided, however, that certain loans expended on reproductive works may be excluded in calculating the limit.

Loans under the Local Government Act may be raised by four methods, viz., limited overdraft, and renewal, ordinary, or special loans as described on page 552 of the 1939-40 issue of the Year Book. The Governor's approval of a loan is required in all instances with the exception of limited overdrafts.

Renewal, ordinary, or special loans under the Local Government Act are secured, firstly upon the income of the fund to which the loans belong, and, secondly, upon the income of the council arising from any source.

Unless the loans are repayable by instalments at intervals of one year or less, there must be a sinking fund for loan repayment in every fund in respect of which a renewal, ordinary, or special loan has been raised, and in each year the council must transfer to the sinking fund a sum not less than the amounts which were stated in its applications for the approval of the loans.

Councils may enter into time payment contracts to pay for purchases or works by instalments spread over a period of years.

County councils may raise loans if expressly authorised under the powers delegated by constituent councils. They are not subject to the limitation of borrowing imposed on municipalities and shires.

The Treasurer is empowered on the recommendation of the Minister to guarantee the repayment of loans raised by the municipalities situated within the Western Division (and also the municipalities of Balranald and Nyngan) and by county councils engaged in the supply of water or electricity services. Two loans raised by the Sutherland Shire Council in London are guaranteed under special Act. At 30th June, 1945, the amount of guaranteed loans outstanding, less sinking fund investments, was £564,670, repayable in Australia and £87,573 repayable in London.

#### *Loan Expenditure.*

The following table shows particulars of the expenditure by local governing bodies in 1944 from the proceeds of loans raised by the sale of debentures and inscribed stock. Government advances and time payment debts are not included but are shown in Table 324.

TABLE 322.—Local Government, N.S.W., Loan Expenditure, 1944.

Object.	Municipalities and Shires.			County Councils.*	Total.
	Metro-politan.	City of Greater Newcastle.	Country.		
Ordinary Services—	£	£	£	£	£
Roads, Bridges, Drainage, etc. ... ..	12,010	20,989	17,902	...	50,901
Parks, Baths, Beaches, etc. ... ..	863	787	4,476	...	6,126
Public Markets ... ..	1,175	...	...	...	1,175
Plant and Property ... ..	7,415	340	2,009	...	9,773
Other ... ..	...	82	562	...	644
Total, Ordinary Services ... ..	21,463	22,207	24,949	...	68,619
Trading Undertakings—					
Electricity ... ..	1,217	25,198	177,626	74,080	278,121
Gas ... ..	...	...	26,956	...	26,956
Water ... ..	...	...	20,340	10,438	30,778
Sewerage ... ..	...	...	10,859	...	10,859
Abattoirs ... ..	...	32,709	7,976	...	40,685
Total, Loan Expenditure ... ..	22,680	80,114	268,706	84,518	456,018

\* Including Grafton and South Grafton Water

The distribution of "Ordinary Services" expenditure as shown in the table is approximate. Only new loan expenditure on works and services is included, and amounts devoted to repayment of old loans, Government advances or time payment debts are excluded.

The loan expenditure of the local governing bodies in New South Wales in various years since 1929 is shown below, also the amount provided for the redemption of loan debt in various years since 1931.

TABLE 323.—Local Government, N.S.W., Loan Expenditure and Repayments, 1929 to 1944.

Year.	Municipalities and Shires.					County Councils. †	Total.
	Metropolitan.		Greater Newcastle.	Country.			
	City of Sydney. *	Suburbs.		Municipal- ities.	Shires.		
Loan Expenditure.							
	£000	£000	£000	£000	£000	£000	£000
1929... ..	1,235	885	238	222	294	2,556	5,430
1931... ..	185	516	25	75	62	58	921
1936... ..	106	244	36	136	159	33	714
1937... ..	138	808	156	717	686	469	2,974
1938... ..	118	651	140	1,054	690	478	3,131
1939... ..	158	383	171	763	568	1,114	3,157
1944... ..	8	15	80	239	30	84	456
Repayment of Loans.‡							
	£000	£000	£000	£000	£000	£000	£000
1931... ..	275	398	55	129	97	198	1,152
1936... ..	139	406	61	131	109	665	1,511
1937... ..	479	448	67	141	136	268	1,539
1938... ..	268	504	81	173	174	282	1,482
1939... ..	310	509	89	205	209	306	1,628
1944... ..	305	449	106	233	230	458	1,781

\* Exclusive of Electricity Undertaking (now Sydney County Council).

† Includes the Sydney County Council and the Grafton and South Grafton Water Board.

‡ Includes credits to Sinking Fund Reserves.

Under the heading "Repayment of loans" is shown the amount applied in each year to the redemption of loans. The figures include direct repayments to lenders where loans are repayable by yearly or half-yearly instalments and, where loans are of fixed term, credits to sinking funds in the form of contributions from revenue account and interest earnings on accumulated investments which are generally credited direct to sinking fund accounts. Repayments of loans from sinking funds and from renewal or conversion loans are not included.

Fluctuations in the amounts shown as repayments in the City of Sydney are due to the inclusion of special items, viz., the proceeds of sales of resumed property when invested for repayment of loans at maturity, and transfers to revenue account of surplus sinking fund accumulations in respect of matured loans.



The Sydney County Council in some years has expended cash accumulated in ordinary trading operations in the retirement of substantial amounts of debentures, and in this way fluctuations have arisen in repayments by county councils, as shown in the table.

*Government Advances and Time Payment Debts.*

The expenditure from repayable Government advances and time payment debts by local governing bodies in New South Wales in the years 1936 to 1939 and in 1944 is shown below:—

TABLE 324.—Local Government, N.S.W., Expenditure from Government Advances and Time Payment Debts, 1936 to 1944.

Year.	Municipalities and Shires.			County Councils.	All Local Governing Bodies.		
	Sydney and Suburbs.	City of Greater Newcastle.	Country Municipalities and Shires.		Government Advances.	Time Payment Debts.	Grand Total.
	£	£	£	£	£	£	£
1936 ...	65,152	9,142	298,548	...	321,413	51,429	372,842
1937 ...	46,022	330	80,542	...	67,895	58,999	126,894
1938 ...	18,977	340	75,249	14,465	25,725	83,306	109,031
1939 ...	5,196	476	84,665	24,103	39,427	75,013	114,440
1944 ...	4,790	...	44,531	13,085	24,311	38,095	62,406

Expenditure from Government advances and time payment debts in 1944 included expenditure on ordinary services amounting to £30,625, viz., roads, bridges, etc., £13,167; plant and property, £10,490, and other items, £6,968. Expenditure on electricity works was £7,123; gas works, £2,769; water supply, £13,867; sewerage works, £22; and abattoirs, £8,000.

Repayments of principal in respect of Government advances and time payment debts in 1944 amounted to £88,214 and £39,128 respectively. The amount of indebtedness to the Government declined substantially after 1937, as shown by the following table. This was due largely to the arrangements under which capital debt of a number of councils for water and sewerage works was partly remitted and the balance refinanced from other loan raisings.

TABLE 325.—Local Government, N.S.W., Government Advances and Time Payment Debts, Amounts Outstanding, 1936 to 1944.

At 31st December.	Municipalities and Shires.			County Councils.	All Local Government Bodies.		
	Metro-politan.	City of Greater Newcastle.	Country Municipalities and Shires.		Government Advances.	Time Payment Debts.	Grand Total.
1936 ...	490,242	83,317	5,492,456	79,860	5,910,597	235,278	6,145,875
1937 ...	476,416	73,159	5,445,345	138,777	5,925,605	208,092	6,133,697
1938 ...	412,470	64,927	2,376,410	17,922	2,614,829	256,900	2,871,729
1939 ...	360,954	55,124	1,626,856	30,272	1,849,892	223,314	2,073,206
1942 ...	219,688	36,098	954,451	24,531	1,108,994	125,804	1,234,798
1943 ...	168,326	28,148	867,490	22,385	984,882	101,467	1,086,349
1944 ...	131,743	20,493	852,943	27,290	949,652	82,787	1,032,439

*Loan Debt.*

The loan debt on account of debentures and inscribed stock issued by local governing bodies in New South Wales amounted to £42,094,282 as at 31st December, 1944. The net loan debt, after deducting sinking funds, was £32,368,097. In addition, the long term indebtedness of the councils included £949,652 owing to the Government and £82,787 on time payment contracts, as shown in Table 325.

TABLE 326.—Local Government, N.S.W., Loan Debt and Sinking Funds, 1944.

Local Bodies.	Loans Outstanding.				Accumulated Sinking Funds.
	Australia.	London.	New York.	Total.	
	£ (Aust.)	£ (Stg.)	£*	£	£
Municipalities and Shires—					
Sydney, City ...	9,411,576	1,811,600	...	11,223,176	5,487,760
Suburbs ...	3,075,083	...	...	3,075,083	1,020
Newcastle, Greater City ...	1,087,015	...	...	1,087,015	...
Country Municipalities ...	6,496,914	...	...	6,496,914	114,566
Shires ...	2,280,487	305,000	...	2,585,487	225,916
Total Municipalities and Shires ...	22,351,075	2,116,600	...	24,467,675	5,829,262
County Councils† ...	10,840,319	5,063,000	1,723,288	17,626,607	3,896,923
Grand Total ...	33,191,394	7,179,600	1,723,288	42,094,282	9,726,185

\* Repayable in Dollars; converted at 4·8665 Dollars to the £.

† Includes Grafton and South Grafton Water Board.

Practically all the loan debts owing by councils under the Local Government Act are repayable by half-yearly instalments. Consequently their accumulated sinking funds are small. On the other hand, most of the loans of the City of Sydney and Sydney County Council were floated for a fixed term, with provision for sinking fund. Therefore the accumulated sinking funds of these two bodies are large. At the end of 1944 they were equivalent to 49 per cent. and 24·5 per cent. of the respective loan debts.

The following table shows the net loan debt at the end of various years since 1921. Particulars of the gross loan debt and accumulated sinking funds for corresponding years are shown in Table 328.

TABLE 327.—Local Government, N.S.W., Net Loan Debt, 1921 to 1944.

At 31st December.	Municipalities and Shires.					County Councils.†	Net Amount of Loans Outstand- ing.
	Metropolitan.		City of Greater Newcastle.	Country.			
	City of Sydney.*	Suburbs.		Municipali- ties.	Shires.		
	£000.	£000.	£000.	£000.	£000.	£000.	£000.
1921... ..	4,389	1,253	226	507	83	3,510	9,968
1931... ..	8,095	5,836	1,000	1,724	1,410	13,323	31,388
1936... ..	7,329	4,557	831	1,246	1,210	12,392	27,565
1937... ..	7,066	5,091	940	2,051	1,916	12,579	29,643
1938... ..	6,854	5,167	958	5,348	2,536	12,929	33,792
1939... ..	6,725	5,068	1,232	6,345	2,978	13,732	36,080
1942... ..	6,112	4,018	1,200	6,651	2,786	14,291	35,058
1943... ..	5,737	3,526	1,150	6,464	2,541	14,035	33,453
1944... ..	5,735	3,074	1,087	6,382	2,360	13,730	32,368

\* Exclusive of Loans of Electricity Undertaking (now Sydney County Council).

† Includes the Sydney County Council and the Grafton and South Grafton Water Board.

Between 1936 and 1940 councils were carrying out extensive loan works programmes, but part of the increase in the net loan liability related to loans raised to repay debt to the Government for water and sewerage works. The principal outstanding in respect of such loans was £3,194,827 at the end of 1939 and £3,104,185 in 1944. During the war years little was spent on public works and repayments of loans greatly exceeded new raisings.

The net loan liability at the end of 1944 was distributed as follows:—Electricity works, £14,612,135 (45.1 per cent.); abattoirs, £148,371; gas-works, £55,820; water supply, £3,707,735 (11.5 per cent.); sewerage, £2,540,132 (7.3 per cent.); and roads, bridges, buildings, parks and reserves, baths, plant, property, etc., £11,303,904 (34.9 per cent.).

The place of redemption and the approximate amount of interest payable on the loan debt of the local governing bodies in New South Wales, are shown in the following table:—

TABLE 328.—Local Government, N.S.W., Domicile of Gross Loan Debt and Interest, 1921 to 1944.

Year.	Gross Amount of Loans.			Sinking Fund.	Net Amount of Loans.	Annual Interest.		
	Australian.	Oversea. *	Total.			Australia.	Oversea. *	Total.
	£000	£000	£000	£000	£000	£000	£000	£000
1921 ... ..	9,922	1,512	11,434	1,466	9,968	421	86	507
1931 ... ..	26,026	9,331	35,357	3,969	31,388	1,252	517	1,769
1936 ... ..	23,866	9,409	33,275	5,710	27,565	1,024	470	1,494
1937 ... ..	26,591	9,390	35,981	6,338	29,643	1,087	469	1,556
1938 ... ..	31,123	9,371	40,494	6,703	33,791	1,224	468	1,692
1939 ... ..	33,939	9,352	43,291	7,211	36,080	1,422	467	1,889
1942 ... ..	34,684	9,260	43,944	8,886	35,058	†	†	†
1943 ... ..	33,791	8,976	42,767	9,314	33,453	†	†	†
1944 ... ..	33,191	8,903	42,094	9,726	32,368	1,407	437	1,844

\* Year 1921 London only; New York included in 1931 and later years.  
See Table 326 for currency values.

† Not available.

METROPOLITAN WATER SUPPLY AND SEWERAGE.

The Metropolitan Water, Sewerage and Drainage Board controls the water supply and sewerage services in the County of Cumberland. The Board's jurisdiction extends to a large district outside the County of Cumberland and embraces a strip of territory extending along the South Coast beyond Wollongong to Lake Illawarra.

The Board is composed of seven members. Two members, a president and a vice-president, are appointed by the Governor for a period of five years, and five members are elected by the aldermen and councillors of local areas concerned to hold office for four years. For the purposes of the elections, the municipalities and shires have been grouped into five constituencies and one member is elected by each group.

The catchment areas of the Sydney water supply are the Nepean 347 square miles, Woronora 29 square miles, and Warragamba 3,383 square miles. The water storage capacity of the system is 125,144 million gallons. There are 92 service reservoirs in the area reticulated, with a total capacity of 537,643,000 gallons.

The total length of water mains as at 30th June, 1946, was 4,657 miles.

The sewerage system consists of three main outfalls—the Bondi ocean outfall; the southern and western suburbs outfall, which discharges into the Pacific Ocean at Long Bay; and the northern suburbs outfall, discharging into the ocean at North Point.

The Board also maintains 99 miles of channels for stormwater drainage purposes, and is authorised to levy drainage rates within areas notified by gazettal.

The following statement shows the number of premises supplied with water and those connected with the sewerage system administered by the Metropolitan Board in various years since 1921:—

TABLE 329.—Metropolitan Water and Sewerage, Particulars of Services, 1921 to 1946.

Year ended 30th June.	Water Supply.			Sewerage.		
	Premises Supplied.	Total Consumption during Year.	Average Daily Supply.	Premises Connected.	Length of Sewers.	Length of Stormwater Drains.
	No.	Thousand gallons.	Thousand gallons.	No.	miles.	miles.
1921	221,886	17,701,000	48,496	148,923	1,197	64
1931	308,657	30,803,000	84,390	204,772	1,871	76
1941	368,790	27,643,000	75,735	270,887	2,705	88
1942	374,710	23,521,000	64,400	276,900	2,752	88
1943	374,717	30,530,000	83,600	278,922	2,755	88
1944	375,285	36,245,000	99,000	280,737	2,756	89
1945	374,660*	41,107,000	112,600	281,957*	2,760	93
1946	378,277*	44,437,000	121,700	283,364*	2,780	99

\* Improved properties for which service is available. Records revised.

General rates for water and sewerage are levied on the assessed annual value of the premises. The rates since 1934-35 have been 9½d. in the £ for water and 8½d. for sewerage.

The charge for water supplied by meter for gardens, livestock, and trade purposes is 1s. 2d. Water is supplied without a meter to areas, mostly small gardens, not exceeding 1,000 square feet for a special fee of 8s. per annum.

Stormwater drainage rates are fixed in each area, so as to yield the revenue required to meet expenses, interest and sinking fund charges, or the Board may arrange that the council of the area pay from its general fund a sum equivalent to the proceeds of a rate.

The capital debt of the Board at 30th June, 1946, amounted to £47,124,380, against which were balances in loan repayment sinking fund totalling £1,582,901.

TABLE 330.—Metropolitan Water, Sewerage and Drainage,  
Capital Debt at 30th June, 1946.

Particulars.	Water.	Sewerage.	Drainage.	Total.
Due to State Government—	£	£	£	£
Loan Funds ... ..	9,079,280	3,757,726	...	12,837,006
Special Advances ... ..	3,565,729	1,618,942	...	4,639,733
Unemployment Relief Works } ...				544,938
Total due to State ... ..	12,645,009	5,376,668	...	18,021,677
Loans raised by Board ... ..	16,122,576	12,080,321	899,805	29,102,702
Less Sinking Fund ... ..	854,881	675,683	52,337	1,582,901
Net Loan Debt ... ..	15,267,695	11,404,638	847,468	27,519,801
Total Net Capital Debt ... ..	27,912,704	16,781,306	847,468	45,541,478

The Board is required to pay interest on its debt to the State, also a proportion of the exchange and sinking fund charges payable on the public debt of the State. The rate of interest has been 3½ per cent. since July, 1934.

The Board, with the approval of the Governor, may raise its own loans, but the debt so incurred in respect of any of its services must not exceed 20 per cent. of the unimproved value of the lands ratable for that service. A sinking fund provision of 10s. per cent. is required in respect of such loans.

The authority to raise loans was granted in 1925, but the Board's first loan was not floated until July, 1928. In the intervening years the Treasury advanced moneys for the construction of works, and these advances, amounting to £6,495,000, were to be repaid by annual instalments of £324,750 over a period of twenty years from 1st January, 1930. The amount outstanding at 30th June, 1938, was £5,196,000. Then it was arranged that repayment should be spread over 40 years and be made from revenue by annual instalments of £243,314 including principal and interest.

At 30th June, 1946, the amounts outstanding in respect of loans floated by the Board included £2,000,000 sterling at 4 per cent. outstanding in London, and £1,282,852 (dollars converted at \$4.8665 to £) at 5½ per cent. outstanding in New York. An amount of £25,319,850 was outstanding in Australia, nominal rates of interest being as follows:—

Per cent.	Amount.	Per cent.	Amount.
£ s. d.	£	£ s. d.	£
3 7 6	1,999,000		
3 8 9	1,451,400	4 5 0	6,575,000
3 11 3	1,000,000	4 7 6	1,000,000
3 12 6	1,850,000	4 9 1	1,000,000
3 15 0	999,700	4 10 0	1,500,000
4 0 0	5,120,000	4 16 10	900,000
4 2 6	1,000,000	5 0 0	100,000
4 3 9	824,750		
		Total	... 25,319,850

A loan of £1,000,000 at £3 7s. 6d. per cent. interest floated in Australia in 1945-46 was the first new loan since 1942-43.

The following statement shows particulars of the financial transactions relating to the services controlled by the Metropolitan Board in various years since 1920-21:—

TABLE 331.—Metropolitan Water, Sewerage and Drainage, Finances, 1921 to 1946.

Year ended 30th June.	Capital Indebtedness.	Gross Revenue.	Working Expenses and Management.	Net Revenue.	Interest on Capital.	Ex-change.	Sinking Fund Contribution.	Surplus.
	£	£	£	£	£	£	£	£
<i>Water Supply.</i>								
1921	10,323,252	855,751	347,298	508,453	473,890	...	...	34,563
1931	23,331,090	1,672,954	456,474	1,216,480	1,062,981	93,921	58,010	1,568
1939	26,690,265	1,815,089	603,276	1,211,813	974,982	64,449	149,954	22,428
1941	26,633,092	1,968,542	713,489	1,255,053	1,035,603	70,905	167,076	(—) 18,591
1942	28,057,970	2,034,397	719,192	1,315,205	1,041,760	67,868	174,587	30,990
1943	28,148,034	2,090,832	760,004	1,330,828	1,061,733	67,727	191,881	9,487
1944	28,459,359	2,189,676	816,923	1,372,753	1,070,305	68,202	203,174	31,072
1945	28,307,128	2,276,922	932,837	1,344,085	1,053,283	67,684	210,304	12,814
1946	28,707,585	2,376,692	1,020,510	1,356,182	1,069,116	66,074	215,565	5,427
<i>Sewerage.</i>								
1921*	7,329,632	615,615	229,441	386,174	341,675	...	...	44,490
1931	14,440,475	979,389	247,806	731,493	694,575	63,944	39,674	(—) 66,700
1939	16,018,587	1,067,755	340,236	727,519	612,854	32,165	85,726	(—) 3,226
1941	17,276,689	1,194,262	388,688	805,574	655,195	36,695	93,436	20,248
1942	17,366,901	1,244,386	430,779	813,607	689,099	39,383	104,422	(—) 20,107
1943	17,307,720	1,341,692	493,200	848,492	685,905	39,314	112,117	11,066
1944	17,243,266	1,379,968	523,898	847,070	683,346	39,506	115,843	8,375
1945	17,165,633	1,379,075	556,469	822,606	672,644	39,212	119,984	(—) 9,234
1946	17,456,989	1,398,300	560,953	837,347	674,856	38,529	122,297	1,665
<i>Drainage.</i>								
1931	690,450	51,745	11,516	40,229	33,880	2,624	1,872	1,853
1939	1,030,890	43,850	13,910	29,940	41,389	1,869	5,884	(—) 19,202
1941	865,652	48,981	14,612	34,369	43,922	2,055	6,386	(—) 18,594
1942	864,409	63,411	14,403	49,008	36,830	2,278	4,332	5,568
1943	863,263	71,099	18,644	53,055	36,604	2,279	4,870	9,242
1944	862,256	73,996	24,751	49,245	36,538	2,279	4,929	5,499
1945	860,903	75,300	28,133	47,167	35,976	2,272	5,151	3,768
1946	899,805	77,175	29,046	47,629	36,409	2,272	5,170	3,678

\* Includes particulars of Drainage Branch.

The working expenses shown in the table include charges made annually for the renewal of works. Such charges amounted in 1943-44 to £273,586, in 1944-45 to £274,121 and in 1945-46 to £274,182, including in each year £23,456 written-off expenditure on renewals from loan funds which had been temporarily capitalised. The balance of the charges was transferred to renewals reserve account, which received additional credits totalling £60,997 in the three years, mainly from revenue surpluses. Actual expenditure on renewals amounted to £21,945 in 1943-44, £62,308 in 1944-45, and £37,643 in 1945-46, and the balance held in renewals reserve was £998,457 at 30th June, 1946.

#### THE HUNTER DISTRICT WATER SUPPLY AND SEWERAGE.

The first water supply works of the Lower Hunter were constructed by the Government under the provisions of the Country Towns Water Supply and Sewerage Act of 1880. In 1892, control of the works was transferred to the Hunter District Water Board.

Water is obtained mainly from a dam of 5,000 million gallons capacity on the Chichester River and the catchment area is 76 square miles. This supply is supplemented by water extracted from sandbeds lying to the north of the Hunter River estuary. The source of water is rainfall on the sandbeds, which are about 50 square miles in extent. A continuous yield of 15 million gallons per day is expected from an area of 30 square miles being worked at present.

The sewerage scheme for the Hunter district has its outfall at Merewether Gulf, some distance south from Newcastle. The districts served are Greater Newcastle, Maitland and Cessnock.

Particulars relating to the water supply and sewerage services of the Board at intervals since 1921 are shown below:—

TABLE 332.—Hunter District Water and Sewerage, Particulars of Services, 1921 to 1946.

Year ended 30th June.	Water Supply.			Sewerage.	
	Properties Supplied.	Supply during year.	Average Daily Supply Per Property.	Properties Connected.	Length of Sewer.
	No.	thousand gallons.	gallons.	No.	miles.
1921 ... ..	25,874	1,711,187	181	12,218	148
1931 ... ..	42,631	2,905,391	187	21,471	200
1939 ... ..	48,370	4,330,760	245	28,257	337
1941 ... ..	51,082	4,509,548	242	31,890	554
1942 ... ..	51,708	5,538,126	293	33,336	569
1943 ... ..	52,121	5,933,027	311	34,989	572
1944 ... ..	52,320	5,791,200	302	36,153	572
1945 ... ..	53,546	6,413,341	328	36,802	575
1946 ... ..	54,489	6,413,090	322	37,820	579

The Hunter District Water Board consists of seven members. A president and a vice-president are appointed by the Governor for a maximum period of seven years, and five members are elected by the councils of constituent municipalities and shires to hold office for four years.

The Board's accounts formed part of the accounts of the State Treasury until 1st July, 1938.

The net capital debt of the Board at 30th June, 1946, was £6,722,505, viz., owing to the State Government £3,168,689 and loans raised by the Board £3,553,816. The gross amount owing in respect of loans was £3,650,000, but this was offset by £96,184 held in sinking fund for repayment.

The Board is authorised, with the Governor's approval, to obtain bank overdrafts and to raise loans, locally or overseas, for the construction of additional works, the renewal of loans and the repayment of indebtedness to the State or any financial institution. The State Government will guarantee loans raised by the Board and the Board must establish sinking funds to provide for their repayment in accordance with the terms of the Governor's approval.

Water and sewerage rates are levied on the assessed annual value. Since 1st July, 1936, the rates have been as follows, viz., water 12d. and sewerage 15d. in the pound, with a minimum of 15s., on ratable premises; water 9d. and sewerage 12d. in the pound, with a minimum of 5s., on ratable vacant lands. Unless fixed by special agreement the charge for water by meter is 1s. 3d. per 1,000 gallons.

A stormwater drainage rate of 3d. in the pound is levied on the assessed annual value of areas drained.

The Board is required to pay interest and sinking fund charges on its loans, and to pay interest on its debt to the State at the rate of 3½ per cent. together with a proportion of the exchange and sinking fund charges payable on the public debt of the State.

Particulars of the finances of the Hunter District Water Board in various years since 1920-21 are shown in the following table:—

TABLE 333.—Hunter District Water, Sewerage and Drainage,  
Finances, 1921 to 1946.

Year ended 30th June.	Capital Debt.	Gross Revenue.	Working Expenses and Manage- ment.	Interest on Loan Capital.	Exchange.	Sinking Fund.	Surplus.
	£	£	£	£	£	£	£
<i>Water Supply.</i>							
1921 ... ..	1,472,074	116,320	59,895	35,556	...	...	20,869
1931 ... ..	2,847,998	235,325	77,706	144,720	15,578	8,117	(—) 10,796
1939 ... ..	2,969,881	246,845	104,084	105,201	13,275	13,407	10,878
1941 ... ..	3,554,207	266,601	123,308	96,815	11,271	15,300	19,907
1942 ... ..	3,842,583	282,710	151,634	122,997	11,148	19,035	(—) 22,104
1943 ... ..	3,993,470	306,962	148,017	135,584	11,106	21,739	(—) 9,484
1944 ... ..	4,136,886	312,340	148,890	137,619	11,236	24,057	(—) 9,462
1945 ... ..	4,235,703	311,202	157,765	148,350	11,131	25,443	(—) 31,487
1946 ... ..	4,363,202	313,459	127,939	155,831	10,734	26,567	(—) 7,612
<i>Sewerage.</i>							
1921 ... ..	590,790	32,164	16,007	25,328	...	...	(—) 9,171
1931 ... ..	1,234,476	91,158	37,630	34,886	9,756	5,083	3,803
1939 ... ..	1,481,185	123,544	56,070	54,943	6,620	6,522	(—) 611
1941 ... ..	2,023,707	144,792	74,854	46,919	4,050	8,628	10,341
1942 ... ..	2,180,912	167,215	85,917	80,168	4,004	10,672	(—) 13,546
1943 ... ..	2,214,462	178,985	93,952	83,764	3,989	11,762	(—) 14,482
1944 ... ..	2,233,755	185,680	98,194	85,004	4,035	12,421	(—) 13,974
1945 ... ..	2,251,003	190,088	97,676	85,609	3,997	12,795	(—) 9,989
1946 ... ..	2,302,257	189,739	79,422	86,782	3,855	13,188	6,492
<i>Stormwater Drainage.</i>							
1931 ... ..	634,326	...	...	...	...	...	...
1939 ... ..	123,814	15,343	7,466	7,207	939	957	(—) 1,226
1941 ... ..	114,097	17,473	10,837	5,208	524	588	316
1942 ... ..	115,223	17,858	11,463	5,276	518	617	(—) 16
1943 ... ..	115,308	18,294	9,681	5,260	515	668	2,170
1944 ... ..	115,679	19,217	9,101	5,208	521	738	3,649
1945 ... ..	121,278	19,195	9,556	5,295	516	801	3,027
1946 ... ..	129,258	19,375	4,693	5,595	497	869	7,721



Working expenses include amounts transferred from revenue to the renewals reserve account. Since the separation of the Board from the State finances in 1938, such transfers have totalled £333,520, including £54,650 in 1943-44 and £55,530 in 1944-45, and the balance at credit of renewals reserve at 30th June, 1946, was £326,717.

#### FIRE BRIGADES.

The public services for the prevention and extinguishing of fires are controlled by a Board of Fire Commissioners, constituted under the Fire Brigades Act. Its jurisdiction extends over the City of Sydney and suburban municipalities, Greater Newcastle, Broken Hill, and other municipalities, and shires in respect of towns contained in them.

The Board consists of a president, appointed by the Governor for a term of five years, and seven members, elected for a term of three years, viz., one by the councils of the Sydney and suburban municipalities and shires, one by the councils of the other incorporated areas to which the Act applies, three elected by the fire insurance companies, one by the members of volunteer fire brigades, and one by the permanent firemen.

In each year the Board makes an estimate of the amount proposed to be expended in the various fire districts during the ensuing year, and of this sum the councils of the municipalities and shires concerned contribute one-fourth, the insurance companies one-half, and the Government one-fourth. Payments by the insurance companies are based on the amount of premiums payable in respect of fire risks within each district.

The Board establishes and maintains permanent fire brigades and authorises the constitution of volunteer brigades, which are subsidised out of the funds. In the metropolitan districts in 1946 the fire brigades comprised 932 officers and permanent firemen whose services are wholly at the Board's disposal and 268 volunteers. The country brigades consisted of 107 officers and permanent firemen and 1,640 volunteers. There is also a reserve corps.

The following table shows the revenue account of the Board of Fire Commissioners for the year:—

TABLE 334.—Fire Brigades, Revenue Account, 1946.

Revenue.		Expenditure.	
	£		£
Subsidy from Government ...	172,178	Administration ... ..	19,903
Subsidy from Municipalities and Shires ... ..	172,178	Firemen including Volunteers—	
Subsidy from Fire Insurance Companies and Firms ... ..	344,356	Salaries ... ..	478,171
Other ... ..	18,465	Superannuation ... ..	29,437
		Equipment and Property Charges	36,243
		Maintenance and General ...	137,105
Total Revenue ... ..	£707,177	Total Expenditure ... ..	£700,859

In the Sydney Fire district contributions by municipalities and shires in 1946 represented 7s. 1.25d. per £100 of assessed annual value of the ratable land, and contributions from insurance companies and firms who insured goods with companies not registered in New South Wales represented 20.16 per cent. of the premiums.

The estimates of the proposed expenditure by the Board for the year 1947 amounted to £740,192, viz., £588,936 for the Sydney fire district and £151,256 for other districts.

The liabilities of the Board at the end of 1946 consisted of loan debt £122,500, accrued interest thereon £1,683, and bank overdraft £27,051; assets included land and buildings £459,853, fire appliances £384,704, and stocks on hand £92,581.

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## RURAL INDUSTRIES.

A brief résumé of the spread of settlement in New South Wales and of the development of the problem of rural settlement was published at page 679 of the Year Book for 1928-29. (See also page 594 of this volume.)

Owing to the collapse of overseas markets, the prevalence of low prices and the limited world demand for primary products from 1930 to 1936, the problem of rural settlement became (and remained for some years) the the problem of maintaining existing settlement rather than of promoting new development. Following a fluctuating recovery in prices, the policy of closer settlement was resumed towards the end of 1937, but operations were suspended again upon the outbreak of war in 1939.

With the extension of warfare in the Pacific area greater demand arose for supplies of dairy produce, meat, vegetables, rice and other food-stuffs. As a result there was intensification of rural activities to produce fodder crops, vegetables, etc., but in view of depleted manpower, wheat farming was restricted.

### STATISTICS OF RURAL INDUSTRIES IN WAR-TIME.

For the purpose of obtaining as speedily as possible data required by authorities concerned with war-time problems of food supply, organisation of manpower, etc., the collection and compilation of rural statistics for 1941-42 and later years were expedited so that information regarding major items of production has been available within four months of the close of each season. This was rendered possible by the co-operation of landholders in furnishing their returns promptly and of the police in collecting them.

Similar action in regard to statistics of rural production has been taken in the other Australian States. Moreover, the forms used by the State Statisticians have been standardised in regard to items, period to which the details relate and date of collection, so that the data might be assembled speedily for the whole Commonwealth.

### RURAL HOLDINGS.

The land of New South Wales which is occupied in rural holdings consists either of alienated\* lands, lands in course of alienation, leased Crown lands, or various combinations of these tenures, while a considerable area remains as Crown reserves. At 31st March, 1946, the number of agricultural and pastoral holdings of 1 acre or more in extent was 74,173, embracing a total area of 169,380,449 acres.

The area of the State not embraced within such holdings is approximately 28,000,000 acres and includes approximately 3,000,000 acres covered by rivers, lakes, harbours, etc.; 5,000,000 acres of rugged land unfit for

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\* The term "alienated land" as used in this chapter and chapter "Agriculture" refers to the areas so returned by landholders, and includes perpetual leases, homestead selections, etc., as well as land actually alienated or in course of alienation.

occupation of any kind; town lands and holdings less than one acre in extent; land embraced in State forests and not otherwise occupied; unoccupied reserves for necessary public purposes, such as commons, travelling stock and water reserves, roadways, railway enclosures. Most of the land unsuitable for settlement is in the coastal and tableland divisions, but proportionately smaller areas are found in all divisions.

An approximate classification of the main purposes for which rural holdings of one acre and upwards were used in 1911-12 and various years to 1945-46 is shown below and the diagrammatic map at page 9 of this edition illustrates the regions devoted to the principal forms of rural production. As from 1928-29 holdings on which agricultural operations were confined to production of fodder for the livestock on the holding were classified under the heading "grazing" or "dairying" or "grazing and dairying." A certain proportion of the areas classified according to the main purposes shown below was used also for subsidiary activities, such as poultry, pig and bee farming.

TABLE 335.—Rural Holdings, Classification according to Purposes, 1911-12 to 1945-46.

Main purpose for which holdings are used.	Number of Holdings.						
	1911-12.	1925-26.	1930-31.	1935-36.	1939-40.	1944-45.	1945-46
Agriculture ... ..	6,814	11,435	10,806	10,293	10,373	9,497	10,447
Dairying ... ..	3,157	9,766	14,484	14,969	14,210	12,473	12,157
Grazing ... ..	22,011	25,428	24,154	21,970	20,578	22,101	21,590
Agriculture and Dairying ...	8,258	5,624	3,371	4,066	3,752	3,821	3,578
Agriculture and Grazing ...	21,969	18,084	15,969	15,995	18,144	16,341	17,051
Dairying and Grazing ...	2,099	1,794	1,148	1,445	1,309	1,639	1,341
Agriculture, Dairying and Grazing ... ..	4,362	1,734	1,146	1,834	1,433	1,239	1,028
Poultry, Pig, or Bee Farming	879	1,526	1,630	2,786	2,540	4,527	3,973
Total Holdings of one acre and upwards used mainly for Agricultural and Pastoral purposes ...	69,549	75,391	72,708	73,358	72,339	71,638	71,165

NOTE.—The basis of classification was amended in 1928-29.

In addition to those classified above, small holdings—mostly less than 30 acres in extent, which numbered 3,008 in 1945-46—were used partly for agriculture and pastoral purposes, but mainly for residential and other purposes, or were unoccupied at the time of collecting the returns. The particulars in the table do not indicate the actual number of settlers occupying the land—because some holdings are held conjointly, and a number of landholders own more than one holding.

Between 1930-31 and 1939-40 there was a definite trend towards mixed farming. Single purpose holdings declined in number and those used for two or more classes of activity increased. Apart from holdings classified as pig, poultry or bee farms, the number of single purpose holdings used for agriculture, dairying or grazing was 49,444 or 69.6 per cent. in 1930-31 and 45,161 or 64.7 per cent. in 1939-40; on the other hand, holdings used for a combination of these activities increased from 21,634 or 30.4 per cent. in 1930-31 to 24,638 or 35.3 per cent. in 1939-40. During the next six

years the number of single purpose holdings declined further to 44,194, but the proportion rose to 65.8 per cent. as a result of a reversal of the trend in respect of grazing activities, and the proportion of multiple purpose holdings, numbering 22,998, declined to 34.2 per cent.

A summary regarding the holdings used for each of the main rural activities, singly or combined, in 1930-31, 1939-40 and 1945-46 is shown below. A holding is not classified as agricultural if the cultivation is confined to fodder crops for the livestock thereon; consequently the number of cultivated holdings (those with at least one acre of cultivation), viz., 49,391 in 1930-31, 53,251 in 1939-40 and 49,743 in 1945-46, exceeds the number of agricultural holdings as stated in this table:—

TABLE 336.—Rural Holdings used for Agriculture, Dairying and Grazing.

Purpose.	Number of Holdings.			Proportion of Total.		
	1930-31.	1939-40.	1945-46.	1930-31.	1939-40.	1945-46.
<b>Agriculture—</b>				%	%	%
Single Purpose ... ..	10,806	10,373	10,447	34.5	30.8	32.5
Combined with Grazing ...	15,969	18,144	17,051	51.0	53.8	53.1
With other purposes ... ..	4,517	5,185	4,606	14.5	15.4	14.4
<b>Total ... ..</b>	<b>31,292</b>	<b>33,702</b>	<b>32,104</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Dairying—</b>						
Single Purpose ... ..	14,484	14,210	12,157	71.9	68.7	67.2
With other purposes ... ..	5,665	6,494	5,947	28.1	31.3	32.8
<b>Total ... ..</b>	<b>20,149</b>	<b>20,704</b>	<b>18,104</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Grazing—</b>						
Single Purpose ... ..	24,154	20,578	21,590	56.9	49.6	52.6
Combined with Agriculture ...	15,969	18,144	17,051	37.7	43.8	41.6
With other purposes ... ..	2,294	2,742	2,369	5.4	6.6	5.8
<b>Total ... ..</b>	<b>42,417</b>	<b>41,464</b>	<b>41,010</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The proportion of single purpose holdings is highest in dairying, 67.2 per cent., and lowest in agriculture, less than 33 per cent. The holdings used for agriculture and grazing combined represent 53 per cent. of those classified to agriculture and 41.6 per cent. of the holdings used for grazing. There has been an appreciable increase since 1939-40 in the number and proportion of holdings used exclusively for grazing.

#### *Persons Resident on Holdings.*

In each year 1939 to 1942 farmers were required to state the number of persons of all ages residing at 31st March on each holding, excluding guests, visitors and residents of schools, institutions, etc., and distinguishing

between those in permanent and temporary residence. This information was not collected in later war years but is to be obtained as at 31st March, 1948.

The number of persons residing permanently on rural holdings at 31st March was 323,600 in each 1939 and 1940 but decreased as men were drawn from farms into the armed services and into war factories to 313,200 in 1941 and to 291,000 in 1942.

### *Tenure of Holdings.*

The tenure of land-holdings in New South Wales is principally of two classes—freehold and leasehold from the Crown. Only a small proportion of the total area occupied is rented from private owners, although the area held on lease from the Crown is very large. Tenancy, as understood in older countries, therefore, is uncommon, and a very large proportion of the total alienated area is occupied by its owners.

Particulars of the area occupied in each Division of New South Wales, according to the class of tenure at 31st March, 1941, as returned by landholders are shown below; later information has not been collected. The territorial and statistical divisions of the State are distinguished in the map forming the frontispiece of this volume.

TABLE 337.—Area and Tenure of Rural Holdings, 1941.

Division.	Alienated* or virtually alienated.	Leased from Crown with full rights of conversion into free- hold.	Leased from Crown with limited rights of conversion into free- hold.	All other leases held from Crown.	Total Area in Holdings.
	acres.	acres.	acres.	acres.	acres.
Coastal ... ..	9,503,742	1,369,804	198,826	997,132	12,069,504
Tableland ... ..	15,194,867	3,299,352	441,802	1,295,910	20,231,731
Western Slopes ... ..	22,064,700	1,902,407	286,367	1,081,089	25,334,563
Central Plains and Riverina ...	30,899,563	5,046,518	490,741	2,080,706	38,317,528
Western* ... ..	15,731,152	146,321	506,040	61,532,305	77,915,818
New South Wales ' ... ..	93,194,024	11,764,402	1,923,576	66,987,142	173,869,144

\* See footnote, page 381.

In the Western Division a large extent of western lands leases has been converted to leases in perpetuity in terms of legislation enacted in 1932 and 1934. Records of the Department of Lands indicate that of a total area of 77 million acres of western lands leases more than 47 million acres had been gazetted as perpetual leases at 30th June, 1941. In the statistics of rural holdings compiled from landholders' returns, less than 16 million acres were classified in 1941 as alienated or virtually alienated (as defined at foot of page 381) and more than 30 million acres converted to perpetual leasehold were still returned as western lands leases and classified (in Table 337) with all other leases held from Crown.

The area occupied in holdings of various classes in 1941 is expressed in the following table as a proportion of the total area of each division:—

TABLE 338.—Proportionate Area of Rural Holdings in Divisions, 1941.

Division.	Alienated* or virtually alienated.	Leased from Crown with full rights of conversion into free- hold.	Leased from Crown with limited rights of conversion into free- hold.	All other leases held from Crown.	Proportion of Area in rural holdings to total area.
	per cent.	per cent.	per cent.	per cent.	per cent.
Coastal ... ..	42·7	6·1	0·9	4·5	54·2
Tableland ... ..	58·7	12·8	1·7	5·0	78·2
Western Slopes ... ..	78·4	6·8	1·0	3·8	90·0
Central Plains and Riverina...	74·2	12·2	1·2	5·0	92·6
Western* ... ..	19·6	0·2	0·6	76·6	97·0
New South Wales* ...	47·1	5·9	1·0	33·8	87·8

\* See footnote, page 381, and paragraph below Table 337.

In 1941, almost 88 per cent. of the total area of the State was occupied in holdings of one acre and upwards used for agricultural or pastoral purposes. The highest proportion of alienation had taken place in the Western Slopes, viz., 78·4 per cent., and in the Central Plains and Riverina 74·2 per cent. of the area of the division.

The greater intensity of settlement in the more easterly districts necessitates the allocation of a large proportion of land for public purposes, and a very considerable proportion of the remaining Crown land in the Eastern Division is so rugged or wooded as to be unfit or unprofitable for occupation. This is specially the case in the South Coast Division, which in parts is very mountainous; only 38 per cent. of its total area is in rural occupation, as compared with 68 per cent. in the North Coast Division and 57 per cent. in the Hunter and Manning.

#### *Size of Holdings.*

A table showing the number and size of holdings classified according to the total area of alienated and Crown lands combined as at 30th June, 1927, was published on page 683 of the Year Book for 1928-29, but similar information for a later year has not been compiled.

Information regarding the number, area and value of alienated lands in holdings according to size as at 31st March, 1941, is shown on page 689 of the Year Book for 1940-41.

#### VALUE OF ALIENATED RURAL LANDS.

Information as to the improved and unimproved capital values of lands was first collected for statistical purposes in 1920-21. The particulars relate to the value, on a freehold basis, of lands absolutely alienated, in course of alienation, or held in perpetuity, as homestead farms or homestead selections, etc., and used for agricultural and pastoral purposes.

The unimproved capital value is defined as the amount which the land might be expected to realise if sold under such reasonable conditions as a

*bona fide* seller would require, assuming that the actual improvements had not been made, and the improved capital value as the value of the land with all improvements and buildings thereon under similar conditions of sale.

Where particulars of unimproved value are not available from owners, collectors are instructed to obtain them from the records of shire councils, so that the unimproved values quoted may be taken as representing local government assessments, except in the Western Division, where no shires exist.

Very few shires assess improved values, and particulars of improved capital value of rural lands are obtained from the owners.

In the table which follows, therefore, the unimproved capital value represents in most cases the shire valuation, but the improved values are obtained from the owner's assessment of the value of the land and its improvements. It is not possible to deduce the value of the improvements from the figures.

The following table shows in divisions of the State (on the basis of Local Government areas) the distribution of alienated and Crown lands occupied in holdings of one acre and upwards for agricultural and pastoral purposes, together with the total and average value of the alienated lands at 31st March, 1941, the latest information available:—

TABLE 339.—Area and Value of Rural Holdings in Divisions, 1941.

Division.		Alienated* Land in Occupation in Holdings of one acre and over.					Area of Crown Land
		Area.	Unimproved Capital Value of Land.		Improved Capital Value.		
			Total.	Average per acre.	Total.	Average per acre.	
		acres.	£	£	£	£	acres.
<i>Coastal—</i>		000.	000.		000.		000.
North Coast	...	3,336	12,125	3·63	30,322	9·09	1,396
Hunter and Manning		4,110	9,293	2·26	25,837	6·29	667
Metropolitan	...	273	3,117	11·42	7,702	28·21	7
South Coast	... ..	1,785	4,654	2·61	12,170	6·82	496
Total	... ..	9,504	29,189	3·07	76,031	8·00	2,566
<i>Tablelands—</i>							
Northern	... ..	4,614	5,653	1·22	14,850	3·22	1,994
Central	... ..	6,333	10,137	1·60	32,663	5·15	1,424
Southern	... ..	4,248	5,951	1·40	17,258	4·06	1,619
Total	... ..	15,195	21,741	1·43	64,771	4·26	5,037
<i>Western Slopes—</i>							
North	... ..	6,937	10,968	1·58	28,141	4·06	1,407
Central	... ..	6,349	9,700	1·53	30,671	4·83	619
South	... ..	8,779	16,074	1·83	50,403	5·74	1,243
Total	... ..	22,065	36,742	1·66	109,215	4·95	3,269
<i>Plains—</i>							
North-central	... ..	5,754	6,647	1·16	15,914	2·77	1,999
Central	... ..	10,660	9,125	0·86	21,757	2·04	3,278
Riverina	... ..	14,285	21,792	1·52	54,018	3·78	2,341
Total	... ..	30,699	37,564	1·22	91,689	2·98	7,618
<i>Western Division</i>	...	15,731†	1,748	0·11	4,318	0·27	62,185
<i>Whole State</i>	...	93,194	126,984	1·36	346,024	3·71	80,675

\* See footnote, page 381.

† See paragraph above Table 338.



Particulars of the rainfall, productivity, and population of each of the divisions are shown in Table 340 and the diagrammatic maps at page 8 and 9 illustrate the relationship between rainfall and the type of rural enterprise. The average value per acre is closely related to these factors. The greater part of alienated lands in the Western Division is comprised in perpetual leases, but there is a considerable area of freehold land in the eastern confines, and there are naturally marked variations in value per acre between the more accessible and the remote parts of this vast region.

The unimproved value of the alienated portions of rural holdings in value series as at 31st March, 1941 is shown on page 692 of the Year Book for 1940-41.

#### CHARACTER OF SETTLEMENT.

A brief description of the character of rural settlement in New South Wales was published on page 689 of the Year Book for 1928-29.

The following analysis of the State, according to natural divisions on the basis of Local Government areas, shows the rainfall, population, area, and production. A map showing these divisions is published as a frontispiece to this Year Book:—

TABLE 340.—Rainfall, Population, Area and Production, in Divisions.

Division.	Range of Average Annual Rainfall.	Popu-lation at 31st Dec. 1943.	Total Area. †	Annual Production, 1945-46.				
				Wool.	Wheat.	Butter.	Minerals ‡	Manu-factures.
	inches.	000	acres.	lb. 000	bushels. 000	lb. 000	£ 000	£ 000
<i>Coastal—</i>								
North Coast ...	36-75	152	6,965	30	...	49,606	113	2,357
Hunter and Manning ...	22-67	332	8,396	6,806	87	12,658	6,209	15,033
Metropolitan ...	27-47	1,564	958	118	...	298	...	120,478
South Coast ...	27-57	123	5,950	4,053	1	6,543	1,931	5,625
Total ...	...	2,171	22,260	11,007	88	69,105	8,253	143,493
<i>Tablelands—</i>								
Northern ...	29-39	52	8,088	25,366	261	1,279	169	393
Central ...	22-48	154	10,716	52,541	5,039	1,013	1,435	2,843
Southern ...	19-62	48	7,061	35,043	91	293	198	710
Total ...	...	254	25,865	112,950	5,391	2,585	1,802	3,946
<i>Western Slopes—</i>								
North ...	22-32	61	9,200	49,520	8,858	1,151	91	513
Central ...	19-27	61	7,723	43,553	19,090	473	2	514
South ...	18-38	116	11,239	40,191	13,187	4,068	94	1,484
Total ...	...	238	28,162	142,264	41,135	5,692	187	2,511
<i>Central Plains—</i>								
Northern ...	18-26	30	9,580	38,814	4,442	128	} 30	230
Central ...	15-22	25	14,811	53,010	1,932	115		125
Riverina ...	12-23	83	17,003	34,136	9,519	629		949
Total ...	...	138	41,394	125,960	15,893	872	50	1,304
<i>Western Division</i> ...	7-18	50	80,321	39,868	13	26	4,893	1,925
<i>Whole State</i> ...	...	2,851	198,011	431,549	62,520	73,280	15,185	153,179

† Excluding area of harbours not included in local government areas. ‡ Calendar year, 1945.

|| Value added in process of manufacture.

The five principal topographical divisions are strips of territory running from the northern to the southern boundary in a south-westerly direction, embracing, respectively, the coastal belt, tablelands, western slopes, central western plains and Western Division or far western plains. Except the western plains, each is divided into three portions—northern, central and southern—which, with the inclusion of a special metropolitan district, makes fourteen subdivisions, each of which presents fairly uniform natural features and is affected by uniform physiographic factors.

In the north the region of high average rainfall extends further inland than in the south, with the result that the isohyets run in a general north and south direction. The south-western extremity of the Riverina lies about 100 miles further from the coast than does the north-western extremity of the northern plain, and, as the average annual rainfall diminishes with increasing rapidity towards the west, the northern subdivisions shown above generally receive more rain than the central, and the central more than the southern subdivisions.

Rather less than one-half of the total area of the States receives average rains exceeding 20 inches per year, and rather more than one-half receives an average of more than 15 inches per year. Where the rainfall is greatest conditions generally favour the dairying industry, the areas with moderate rainfall being more suitable for sheep and wheat. In the dry western areas wool-growing is the only important rural industry.

Not only the quantity, but the seasonal incidence and reliability of the rainfall, and the amount of evaporation are important considerations in determining the productive possibilities of any region. Intermittent rainfall operates powerfully to the detriment of the western hinterland.

The meteorological conditions of the respective divisions are discussed in greater detail in the chapter "Climate" of this Year Book, which contains a diagrammatic map showing the configuration and rainfall distribution of the State.

Factories are not extensive outside the metropolitan, Newcastle, Port Kembla and Lithgow districts, though there is a number of dairy factories and sawmills in the coastal districts and ore treatment works at Broken Hill in the Western Division.

#### VALUE OF PRODUCTION OF RURAL INDUSTRIES.

Information regarding the value of production of rural and other industries is published in the chapter "Production" of this Year Book and a summary of the gross farm value of rural production in various years since 1901 is shown below. The net value since 1925-26 is shown also; this is estimated by deducting from the gross value such costs as fodder for livestock, seed, fertilisers, etc., and power and water for irrigation.

TABLE 341.—Estimated Value of Production—Rural Industries,  
1901 to 1945-46.

Year.	Gross Value.		Net Value.	
	Amount.	Per Head of Population.	Amount.	Per Head of Population.
	£000	£ s. d.	£000	£ s. d.
1901 ... ..	22,695	16 12 1	...	.....
1911 ... ..	36,869	22 2 10	...	.....
1920-21 ... ..	69,156	33 1 7	...	.....
1925-26 ... ..	66,933	28 17 0	60,952	26 5 5
1928-29 ... ..	74,594	30 0 6	68,079	27 8 1
1930-31 ... ..	42,202	16 11 8	37,751	14 16 8
1931-32 ... ..	45,403	17 13 8	41,617	16 4 2
1932-33 ... ..	50,309	19 8 4	45,408	17 10 6
1933-34 ... ..	60,677	23 4 4	55,826	21 7 3
1934-35 ... ..	51,977	19 14 7	46,886	17 15 11
1935-36 ... ..	64,549	24 6 0	58,404	21 19 8
1936-37 ... ..	78,314	29 4 3	71,172	26 11 0
1937-38 ... ..	71,800	26 10 1	62,679	23 2 9
1938-39 ... ..	59,712	21 16 10	50,161	18 6 11
1939-40 ... ..	72,992	26 8 10	65,921	23 17 7
1940-41 ... ..	67,822	24 7 6	59,888	21 10 6
1941-42 ... ..	72,372	25 16 6	62,998	22 9 7
1942-43 ... ..	90,035	31 16 1	79,726	28 3 3
1943-44 ... ..	100,430	35 3 7	88,608	31 0 9
1944-45 ... ..	86,095	29 16 10	75,031	26 0 2
1945-46 ... ..	107,307	36 16 10	94,838	32 11 2

Details regarding estimates of the value of production in the rural industries are shown in the following chapters.

#### VALUE OF MACHINERY USED ON RURAL HOLDINGS.

A comparison of the value of agricultural, pastoral, and dairying implements and machinery in use on rural holdings during various years since 1920-21 is shown in the following table, allowance being made for depreciation. The information has not been collected since 1940-41.

TABLE 342.—Value of Rural Machinery, 1920-21 to 1940-41.

Season.	Agricultural.	Dairying.	Pastoral.*	Total Value.†
	£	£	£	£
1920-21 ...	7,120,380	910,260	3,141,030	11,171,670
1928-29 ...	10,883,550	1,214,670	5,067,940	17,166,160
1930-31 ...	10,526,390	1,171,000	4,676,920	16,374,310
1931-32 ...	9,526,396	1,149,387	4,125,417	14,801,200
1935-36 ...	9,039,026	1,218,672	4,163,797	14,421,495
1936-37 ...	9,949,677	1,191,124	4,001,702	15,142,503
1937-38 ...	11,050,645	1,224,242	4,239,795	16,514,682
1938-39 ...	11,516,668	1,275,622	4,205,752	16,998,042
1939-40 ...	11,479,732	1,408,270	4,295,827	17,183,829
1940-41 ...	11,679,833	1,502,849	4,416,062	17,598,744

\* Includes in many cases farming implements used on pastoral holdings.

† Excludes machinery, etc., used for poultry, pig and bee-farming.

In 1940-41 the value of machinery used on holdings devoted to poultry, pigs and bees amounted to £389,375, as compared with £148,274 in 1931-32 and £334,163 in 1939-40.

Information as to the number of tractors in use on farms at 30th June, 1930, and in recent years, is shown later.

The following table indicates the approximate value of rural holdings, and of machinery and live stock thereon, in various years between 1929 and 1941; the value of Crown lands leased to landholders is not included:—

TABLE 343.—Value of Rural Holdings, Machinery and Stock, 1929 to 1941.

At 31st March.	Value of Alienated Land and Improvements thereto.	Value of Farm Machinery and Implements.	Value of Livestock on Farms.*	Total.	Average Value of Alienated land per acre (as returned).	
					Unimproved.	Improved.
	£000.	£000.	£000.	£000.	£ s.	£ s.
1929† ...	353,100	17,200	62,000	432,300	1 14	4 18
1930† ...	353,700	17,000	44,800	415,500	1 14	4 17
1931† ...	343,600	16,400	45,500	405,500	1 13	4 13
1932 ...	332,200	14,800	45,600	392,600	1 13	4 12
1936 ...	324,700	14,400	60,600	399,700	1 10	4 2
1937 ...	334,200	15,100	66,300	415,600	1 9	3 18
1938 ...	343,200	16,800	44,800	404,800	1 6	3 12
1939 ...	346,400	17,300	54,800	418,500	1 6	3 12
1940 ...	346,500	17,500	64,200	428,200	1 6	3 12
1941 ...	346,000	18,000	61,800	425,800	1 7	3 14

\* Number as at 30th June or 31st March at prevailing market values.

† 30th June.

#### EMPLOYMENT IN RURAL INDUSTRIES.

Statistics of persons over the age of 14 years permanently engaged in farm work on rural holdings one acre or more in extent have been collected annually since 1921-22; particulars as to temporary employees also have been collected in recent years. Information regarding the number of women working on the holdings is not entirely satisfactory because, as a general rule, their duties are partly domestic and it is difficult to distinguish those whose principal activity is rural work.

A classification of the number of males engaged in farm work on the holdings at the end of each season 1928-29 to 1945-46 is shown below.

TABLE 344.—Rural Labour—Males Working on Holdings, 1929 to 1946.

31st March.	Permanent Owners, Lessees, Share-farmers.	Permanent Employees Receiving Wages.	Relatives not Receiving Wages.	Total, Permanent.	Working Temporarily (Wages or Contract).	Total, Permanent and Temporary.
1929* ...	66,134	34,234	17,495	117,863	†	†
1930* ...	65,300	31,387	19,736	116,423	†	†
1931* ...	66,297	27,949	20,743	114,989	†	†
1932 ...	67,922	26,874	22,133	116,929	†	†
1933 ...	70,779	29,347	21,669	121,795	†	†
1934 ...	70,552	32,718	20,920	124,190	†	†
1935 ...	69,429	36,654	20,325	126,408	†	†
1936 ...	69,353	39,104	18,668	127,125	†	†
1937 ...	68,736	41,063	18,207	128,006	†	†
1938 ...	68,167	41,537	16,347	126,051	†	†
1939 ...	68,009	40,777	17,555	126,341	40,000§	166,341
1940 ...	67,443	40,484	17,629	125,556	†	†
1941 ...	66,395	38,626	16,343	121,364	†	†
1942 ...	64,238	28,546	12,339	105,123	†	†
1943    ...	64,500	26,471	12,172	103,143	12,100	115,243
1944 ...	64,860	23,476	12,484	100,820	12,425	113,245
1945    ...	68,626	22,795	11,965	103,386	16,798‡	120,184‡
1946 ...	72,234	26,628	9,267	108,129	35,951	144,080

\* 30th June.

† Not available.

§ Estimated.

|| Revised.

‡ Excludes 2,960 prisoners of war.

Approximately 166,000 males (126,000 permanent and 40,000 temporary employees) were working on holdings in 1938-39. After the outbreak of war in September, 1939, men were drawn from farms for military service and factory work. The movement accelerated after Japan entered the war, and by March, 1944, the number had declined by 53,000 or 32 per cent. to 113,000. To check the decline, military enrolment was deferred from May, 1942 of persons engaged full time in pastoral, agricultural and dairying industries. For seasonal farm work a pool of soldiers aged 18 to 19 years ineligible for operational duties was formed; where practicable other servicemen were granted leave, and civilians, including women, volunteered.

Further particulars of the war-time organisation of farm labour are given on page 616 of the 1941-42 and 1942-43 edition of the Year Book.

The employment of prisoners of war on farms was approved in April, 1943, and in October of that year the Government directed the release of men from the Forces, the Civil Construction Corps, munition works and protected undertakings for return to farms. Between April, 1944, and March, 1945, discharges from the Forces, mostly effected under this direction, numbered about 7,300, and in the year 1944-45 males on rural holdings increased by 16,939. General demobilisation was responsible mainly for an increase of 23,896 during the year ended March, 1946, but the number (144,000) at its close remained 13 per cent. below the number on holdings in March, 1939.

The number of men classified as owners, lessees or share farmers declined from 68,000 to 64,000 between 1939 and 1942, but the pre-war level was exceeded in 1946. More than 17,500 permanently employed in 1939 were relatives assisting without wages; the number declined to 12,300 in March, 1942, and to 9,300 by March, 1946. The number of men working for wages or on contract fell even more, from 81,000 in 1939 to 36,000 in 1944. Increases in 1944-45 (to 39,600) and 1945-46 (to 62,600) left permanent employees over 35 per cent. and temporary workers about 10 per cent. fewer in number than in March, 1940.

Approximately 8,000 women and girls were working on rural holdings in 1939. Of these more than 5,400 or 66 per cent. were unpaid relatives, 900 were classified as owners or lessees and 1,700 were permanent or temporary employees in receipt of wages. There was a remarkable war-time increase in all these groups, which reached a peak in 1943 when the number of women working on the holdings exceeded 19,000, including 6,500 in receipt of wages.

But this increase did not, even in numbers, offset the war-time reduction of over 50,000 male rural workers. Three years later, in March, 1946, the number of women working on the holdings had declined to 14,100 of whom less than 4,300 were paid employees.

TABLE 345.—Females Recorded as Workers on Rural Holdings 1939 to 1946.

31st March.	Permanent.				Temporary Employees.	Total Permanent and Temporary.
	Owners, Lessees, Sharefarmers.	Employees receiving Wages.	Relatives not receiving Wages.	Total Permanent.		
1939 ... ..	872	745	5,442	7,059	1,000*	8,059
1940 ... ..	1,298	1,018	5,526	7,842	†	†
1941 ... ..	1,275	1,274	6,157	8,706	†	†
1942 ... ..	1,822	1,585	7,872	11,279	†	†
1943 ... ..	2,304	3,438	10,420	16,162	3,128	19,290
1944 ... ..	2,174	2,653	10,554	15,381	1,935	17,316
1945 ... ..	1,990	2,225	9,553	13,768	1,838	15,606
1946 ... ..	1,657	2,129	8,175	11,961	2,160	14,121

\* Estimated.

† Not available.

The amount of wages paid to permanent and casual employees on rural holdings, as stated in the returns of the landholders, in each year 1928-29 to 1941-42 is shown below; the value of board and lodging supplied by the employer is included. Corresponding information is not available for later years except for 1945-46 when £3,085,381 was paid to casual labour; £3,018,188 to males and £67,193 to females.

TABLE 346.—Wages Paid to Rural Workers, 1928-29 to 1941-42.

Year ended March.	Males.			Females— Permanent and Casual.	Total.
	Permanent.	Casual.	Total.		
	£	£	£	£	£
1929* ... ..	6,475,000	3,042,000	9,517,000	83,000	9,600,000
1930* ... ..	5,717,000	2,791,000	8,508,000	86,000	8,594,000
1931* ... ..	4,533,000	2,186,000	6,719,000	71,000	6,790,000
1932 ... ..	4,145,000	2,102,000	6,247,000	50,000	6,297,000
1933 ... ..	4,292,000	2,362,000	6,654,000	52,000	6,706,000
1934 ... ..	4,654,000	2,514,000	7,168,000	52,000	7,220,000
1935 ... ..	5,119,000	2,659,000	7,778,000	53,000	7,831,000
1936 ... ..	5,534,000	3,043,000	8,577,000	52,000	8,629,000
1937 ... ..	6,048,000	3,393,000	9,441,000	49,000	9,490,000
1938 ... ..	6,427,000	3,670,000	10,097,000	60,000	10,157,000
1939 ... ..	6,302,000	3,608,000	9,910,000	65,000	9,975,000
1940 ... ..	6,406,000	3,610,000	10,016,000	88,000	10,104,000
1941 ... ..	6,309,000	3,686,000	9,995,000	116,000	10,111,000
1942 ... ..	5,093,000	3,724,000	8,817,000	180,000	8,997,000

\* Year ended June.

*Conditions of Rural Employment.*

Conditions of rural employment in New South Wales generally were not subject to regulation by industrial arbitration tribunals during the decade preceding the outbreak of war in 1939. The rural industries were removed from the scope of the Industrial Arbitration Act of New South Wales in December, 1929, and Commonwealth rural awards and agreements then in force referred only to certain workers in the pastoral, fruitgrowing and sugar industries.

During the war period, the Commonwealth Government subsidised or assisted producers of certain crops and dairy products needed in prosecuting the war, and wages, hours, etc., of employees engaged in the production of these commodities were regulated.

A special tribunal, the Wheat Harvest Employment Commission, was appointed in 1942 under National Security Regulations, with authority to fix rates of wages and hours for harvesting grain crops of wheat, oats, barley and rye, and hay crops of wheat and oats sown in 1942, and an award was made by the Commission in November, 1942. The regulations were repealed in June, 1943, and under National Security (Industrial Peace) Regulations the matter of conditions of employment for harvesting these crops was referred to the Commonwealth Court of Conciliation and Arbitration. Operation of an award made in November, 1943 was suspended pending consideration of the cost to employers. Later the price guaranteed to farmers for "quota" wheat (see page 463) was increased by 1.33d. per bushel and the award was given retrospective effect from 15th November, 1943, but only for the harvesting of wheat (grain) crops, and remains in operation until rescinded or varied. Rates under the award were increased as from the first pay period in December, 1946.

The first award for the rice growing industry made by the Commonwealth Court of Conciliation and Arbitration in terms of the National Security (Industrial Peace) Regulations, to operate from 14th May, 1942, applied to the harvesting of rice in the Murrumbidgee Irrigation Area. The terms were arranged substantially by agreement between the rice growers and the employees' union, and are subject to review in the event of substantial variation in the price of rice or cost of living. The prescribed rates of wages were increased by 1s. a day as from 22nd May, 1944, on the ground of increased cost of living. At the same time hours were reduced from 48 to 44 per week and the award was extended to rice harvesting in other parts of New South Wales. An amended award operated from 15th April, 1947.

The Defence (Transitional Provisions) Act, 1946, continued these awards until 31st December, 1947.

The rates prescribed for employees engaged in harvesting wheat and rice (without keep) are shown below:—

TABLE 347.—Rates of Wages and Hours of Work—Wheat and Rice Harvesting.

Wheat (Grain).	From Nov. 1943.	From Dec., 1946.	Rice.	May, 1944.	April, 1947.
	per hour. s. d.	per hour. s. d.		per day. s. d.	per day. s. d.
Stacker and thatcher ... ..	3 0	3 2	Platform hand ... ..	19 0	20 6
Driver of binder, header, harvester or tractor ... ..	2 8	2 10	Driver of header ... ..	21 0	22 6
Other harvest hands ... ..	2 4	2 6	Casual hand ... ..	18 6	20 6
			Bag sewer ... ..	per 100 bags 14 6	per 100 bags. 14 6
Hours ... ..	per week. 56	per week. 56	Hours ... ..	per week. 44	per week. 44

Wages of sugar-field workers in the three sugar-mill areas on the northern rivers of New South Wales are regulated by agreement between the Cane Growers' Association and the Australian Workers' Union. The current agreement, to remain in force for three years, commenced on 1st June, 1945. The prescribed rates of wages were as follows:—Field workers over 19 years of age (weekly engagement) £4 16s. 2d.; cane cutters—day labour, £6 10s. 11d. per week; cane cutters—piece work according to a scale based on the quantity cut to the acre, e.g., 15 tons or more, 7s. 10d. per ton; 11 to 12 tons, 9s. 3d. per ton; 8 to 9 tons, 10s. 9d. per ton; 5 to 6 tons, 16s. 4d. per ton. These rates were fixed with reference to a basic wage of 80s. per week (September quarter, 1941) plus 6s. loading, and are subject to quarterly adjustment. The ordinary working hours are 44 per week or 8 on any one day.

The award of the Commonwealth Court relating to fruit growing applies only to employers listed in the award in such districts as the Murrumbidgee Irrigation Area, Wentworth and Curlwaa, Young, Batlow, Kentucky, Gosford, etc., where large quantities of fruit are grown, and does not apply as a common rule in the industry. Minimum rates payable under the award



since December, 1939 were as follow; the weekly rates are 1s. higher in the Murrumbidgee and Murray irrigation settlements:—

TABLE 348.—Rates of Wages, Fruit-Growing Industry (Principal Districts) 1939 to 1947.

Occupation.	December, 1939.	December, 1945.	December, 1946.	May, 1947.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
General Hands—	per week.	per week.	per week.	per week.
In Orchard—Adult Males ... ..	3 10 0	4 16 0	5 4 0	5 6 0
Females 18 years and over ... ..	2 12 4	3 3 8	3 0 0	3 10 4
	per hour.	per hour.	per hour.	per hour.
In Prune Dehydrators (Young) ... ..	0 1 9½	0 2 4½	0 2 6½	0 2 6½
	per week.	per week.	per week.	per week.
Ganger or Foreman in Orchard ... ..	4 5 0	5 2 0	5 10 0	5 12 0
Pruner ... ..	4 8 0	5 5 0	5 13 0	5 15 0
In Packing and Fruit (Vine) Drying Sheds—				
Typer ... ..	4 10 0	5 16 0	6 4 0	6 6 0
Weigher in ... ..	4 8 0	5 5 0	5 13 0	5 15 0
	per basket of 60 lb.	per basket of 60 lb.	per basket of 60 lb.	per basket of 60 lb.
Cherry Picking ... ..	0 2 9	0 3 5½	0 3 5½	0 3 5½

The Commonwealth Court of Conciliation and Arbitration made its first award applying to the dairying industry (under National Security (Industrial Peace) Regulations) to operate from 1st July, 1943. It applies to dairy farms where ordinarily not less than ten cows are kept. Employees may be required to work on any day of the week. Ordinary hours are 56 per week, with a daily spread of 12 hours during May and June, 13 hours in March, April, July and August, and 14 hours in September to February. Overtime at ordinary rate plus 6d. per hour must be paid for work in excess of these hours. Rates of wages are subject to adjustment in November and May each year.

The rates of wages prescribed for employees aged 20 years or over are shown below:—

TABLE 349.—Wages of Dairy Farm Workers, Weekly Rates, 1943 to 1947.

Period.	Males.					Females.
	Shed Hand.	General Farm Hand.	Milker and Carter.	Tractor Driver.	Leading Hand.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
July, 1943 to October, 1943 ... ..	4 16 0	5 1 0	5 12 6	5 16 0	6 1 0	3 4 0
November, 1943 to April, 1944 ... ..	4 17 0	5 2 0	5 13 6	5 17 0	6 2 0	3 4 8
May, 1944 to October, 1946 ... ..	4 16 0	5 1 0	5 12 6	5 16 0	6 1 0	3 4 0
November, 1946 to January, 1947 ... ..	4 18 0	5 3 0	5 14 6	5 18 0	6 3 0	3 5 4
February, 1947 to April, 1947 ... ..	5 4 0	5 9 0	6 0 6	6 4 0	6 9 0	3 9 4
May, 1947 to October, 1947 ... ..	5 6 0	5 11 0	6 2 6	6 6 0	6 11 0	3 10 8
November, 1947 ... ..	5 8 0	5 13 0	6 4 6	6 8 0	6 13 0	3 12 0

The above rates are those prescribed for employees under weekly engagement. If the employee is provided with board and lodging (including laundry and mending for men) the rates are reduced by £1 10s. for males and 16s. for females. The rate for adult females is two-thirds that for male shed hands, and for casual employees the rates are 25 per cent. greater than the weekly rates.

The work of a shed hand on a dairy farm consists of mustering, milking, feeding the stock, cleaning in or about the sheds; a milker or carter is

required in addition to the work of a shed hand to sell or deliver milk from a vehicle to retail customers; a leading hand is in charge of three or more employees.

The first award by the Commonwealth Court of Conciliation and Arbitration for pastoral workers was made as early as 1907 when the shearing rate was fixed at 24s. per 100 sheep shorn (an increase of 4s. over the predominant rate prior to the award). Station hands have been covered by award since 1917.

The pastoral award applied only to employment on the large holdings until 1st January, 1943, when (in terms of National Security Regulations) it was declared a "common rule" of the industry so that it applies where employers are pastoralists or farmers whose main or predominant work is the raising and/or shearing of sheep. It does not apply to the employment of station hands on any property where the number of the sheep depastured does not exceed 2,000.

The rates of wages as prescribed by the pastoral industry award for shearers, shed hands and station hands in New South Wales since September, 1938 are shown below:—

TABLE 350.—Rates of Wages—Shearers and Station Hands, 1938 to 1947.

Date of Change.	Shearers per 100 Ordinary Flock Sheep (Machine).	Shed hands—per week.		Station hands—per week.	
		Found.	Not Found.	With Keep.	Without Keep.
	s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
September, 1938 ... ..	35 6	4 14 0	6 0 0	2 5 6	3 7 0
August, 1940 ... ..	36 0	4 15 6	6 2 3	2 6 9	3 9 0
March, 1941 ... ..	36 9	4 17 9	6 5 9	2 8 9	3 12 0
July, 1941 ... ..	38 0	5 1 0	6 11 3	2 11 9	3 17 0
August, 1942 ... ..	39 3	5 4 6	6 17 0	2 15 0	4 2 0
November, 1942 ... ..	40 3	5 7 3	7 1 6	2 17 6	4 6 0
May, 1943 ... ..	41 3	5 10 0	7 6 0	3 0 3	4 10 0
June, 1945 ... ..	45 0	6 0 0	7 10 0	3 0 3	4 10 0
December, 1946 ... ..	46 9	6 4 9	7 17 9	3 4 9	4 17 0
March, 1947 ... ..	47 0	6 6 4	7 19 0	3 10 2	4 18 0

#### *Rural Workers Accommodation Act, 1926.*

Employers of rural labour are required under the Rural Workers Accommodation Act, 1926, to provide employees engaged for more than 24 hours with accommodation of standards prescribed by regulations (revised in March, 1947) for sleeping, dining, etc., including hygiene facilities, sanitation and the cleanliness of premises. Unless otherwise provided by an industrial award no charge may be made for the accommodation.

The Act applies in all districts other than areas proclaimed as cities. The owner or person entitled to immediate possession must provide the premises, and in the provision of other facilities responsibility extends to the employer as well as to the person entitled to immediate possession. If the latter be a tenant he may, after notifying the landlord, erect buildings in compliance with the Act and may recover from the owner the current value of the buildings when tenancy ceases.

Inspectors appointed under the Act are empowered to enter and inspect the accommodation, and employers must notify them of the date of intended commencement of seasonal work. Notice may be given employers of accommodation requirements and action may be taken in Courts of Petty

Sessions to enforce compliance with the Act. Full-time inspectors are employed and police officers in charge of country stations also act as inspectors.

#### SHARE-FARMING.

The system of share-farming was introduced in New South Wales towards the end of the last century. Under the system the owner provides suitable land and sometimes seed and fertiliser, and the farmer generally provides the necessary plant and labour. The contract is usually that the land be operated for a specified purpose and a fixed time. Various arrangements are made for sharing the product. Sometimes the parties to the agreement take equal shares of the produce up to a specific yield, and any excess goes to the farmer as a bonus. In other cases the owner takes one-third and the farmer two-thirds of the total product. Since 1st July, 1943, tenancy under share-farming agreements has been subject to the Agricultural Holdings Act by which provision is made for a minimum tenancy of two years and right to compensation for improvements effected by tenants (see below).

Particulars regarding the areas used for cultivation or dairying on shares in various seasons from 1915-16 to 1940-41—the latest available—are as follow:—

TABLE 351.—Share-farming, 1915-16 to 1940-41.

Season.	Holdings used for Share Farming.	Share- farmers.	Area Farmed on Shares.		
			Cultivation.	Dairying.	Total.
	No.	No.	acres.	acres.	acres.
1915-16	2,474	4,781	1,297,269	83,668	1,380,937
1920-21	1,668	2,761	614,351	121,976	736,327
1925-26	2,493	3,667	645,395	226,362	871,757
1930-31	3,720	5,033	1,018,591	396,863	1,415,454
1931-32	4,083	5,603	863,083	464,093	1,327,176
1932-33	6,606	9,119	1,559,191	554,151	2,153,342
1935-36	6,331	8,401	1,169,931	736,062	1,905,993
1936-37	6,490	8,380	1,214,170	765,788	1,979,958
1937-38	6,846	8,796	1,359,217	777,272	2,136,489
1938-39	7,366	9,437	1,568,426	810,519	2,378,945
1939-40	6,624	8,459	1,425,636	798,243	2,223,879
1940-41	6,464	8,223	1,433,364	792,632	2,225,996

Holdings on which the shares system was used for agriculture exclusively numbered 3,961 in 1940-41 and for dairying only, 434. Holdings with share-farmers engaged in agriculture and dairying in combination (including dairy farms on which only fodder crops for dairy cattle were grown) numbered 2,069.

Of the areas cultivated in 1940-41 on the shares system, 776,279 acres were in the Western Slopes Division and 515,590 acres were in the Central Plains and Riverina. The cultivation was mainly for wheat, viz., 1,280,665 acres on 3,631 holdings. There were 792,632 acres share-farmed for dairying, of which 730,528 acres, or 92 per cent., were in the Coastal Division.

#### AGRICULTURAL HOLDINGS ACT, 1941.

The majority of tenancies of agricultural land in New South Wales are tenancies at will or yearly tenancies and many areas are worked for cultivation or dairying under share-farming agreements (see above).

Insecurity of tenure leads to the impairment of the productive resources of the land by discouraging good husbandry and improvement of holdings and, from time to time, remedial legislation has been enacted. For instance, the Rural Tenants Act, 1916, which was designed to give tenant farmers right to compensation for certain improvements but did not apply to tenancies at will, and the Agricultural Lessees Relief Act, 1931, by which tenants were enabled to obtain, under certain conditions, reduction of rent and extension of lease. These Acts were repealed by the Agricultural Holdings Act, 1941, which came into operation on 1st July, 1943. It applies to tenancies of agricultural and pastoral holdings of 2 acres or more, including tenancies at will and those under share-farming agreements. The minimum tenancy under the Act is two years, and at least twelve months' notice, to expire at the end of the year, must be given for the termination of a tenancy. The Act also defines rights to compensation for improvements (including those attributable to a better system of farming than required under the contract) and for disturbance of a tenancy.

Certain improvements, such as fertilising, permanent subdivision fences, permanent pastures and repairs to certain buildings, may be effected by the tenant without notice to the landlord. In respect of other improvements the tenant must notify the landlord and, if he agrees, may carry out the work on agreed terms of compensation. If the landlord dissents, the matter may be referred to an agricultural committee for arbitration. If the committee decides that the improvement is not suitable and desirable, no right to compensation will accrue to the tenant in respect of the improvement if he effects it.

In default of agreement or award and provided that the tenant has not withdrawn the notice, the landlord may effect the improvement with right to recover as rent a sum not exceeding five per cent. per annum of the cost; or the tenant may undertake the work with right to compensation in terms of the Act. The maximum rate of interest (5 per cent.) specified in the Act may be varied from time to time by the Minister for Agriculture, having due regard to current rates of interest.

If, on quitting a holding, a tenant satisfies an agricultural committee that its value has been enhanced as a result of a more beneficial system of farming than the standard required by the contract of tenancy, he is entitled to such compensation as represents the value of the enhancement to an incoming tenant. On the other hand, the landlord may be awarded compensation where a holding has deteriorated because the tenant has failed to cultivate it according to the rules of good husbandry.

Agricultural committees are appointed under the Act when required to determine references and matters in dispute. Each committee consists of an officer of the Department of Agriculture as chairman and two members, one selected by the landlord and the other by the tenant from respective panels of landlords and of tenants appointed by the Minister.

#### PASTURE IMPROVEMENT.

##### *Sown Grasses.*

The stock-carrying capacity of the pasture lands is being increased by cultivation of grasses and herbage, both indigenous and imported. The total area of land under sown grasses did not exceed 400,000 acres until 1901. It had risen to approximately 750,000 acres by 1908; 1,500,000 acres by

1920; 2,200,000 acres by 1930; and to 3,300,000 acres in 1940. This area is considerable, but it represents little more than 2 per cent. of the land used for grazing and there is scope for further extension.

The following statement illustrates the increase in the area under sown grasses in each division of the State between 1901 and 1941; later details are not available:—

TABLE 352.—Area of Sown Grasses in Divisions, 1901 to 1941.

Year.	Coastal.	Tablelands.	Western Slopes.	Plains and Riverina.	Western Division.	New South Wales.
	acres.	acres.	acres.	acres.	acres.	acres.
1901 ... ..	337,425	37,434	50,433	15,827	1,622	442,741
1911 ... ..	1,051,943	33,815	15,473	11,474	7,059	1,119,764
1921 ... ..	1,724,457	20,127	14,276	56,284	1,031	1,816,175
1931 ... ..	2,028,660	37,782	43,445	39,975	602	2,150,464
1936 ... ..	2,276,606	139,844	226,600	79,390	19	2,722,459
1937 ... ..	2,270,026	190,606	289,267	119,127	60	2,869,086
1938 ... ..	2,280,479	240,677	364,316	159,299	266	3,045,037
1939 ... ..	2,292,631	278,912	424,437	179,587	24,059	3,199,626
1940 ... ..	2,313,058	309,958	473,683	203,316	1,789	3,301,804
1941 ... ..	2,322,025	346,622	539,587	210,715	468	3,419,417

### *Fertilised Pastures.*

The top-dressing of pastures with fertiliser is practised also as a means of increasing stock-carrying capacity. In 1928-29 artificial manures were applied to 87,686 acres of pastures on 689 holdings. The agricultural depression checked progress in this form of pasture improvement until 1933-34, but there was a rapid increase in the course of the next three years. The area treated in 1937-38 was 875,730 acres, or ten times the area fertilised in 1928-29. Subsequent decreases in the area were due to drought and the scarcity of labour and fertilisers.

Particulars of the use of artificial manures in the improvement of pastures are given hereunder:—

TABLE 353.—Fertilisers used on Pastures, 1928-29 to 1945-46.

Season.	Holdings Using Artificial Manures on Pastures.	Area Treated with Artificial Manures.	Quantity of Artificial Manures Used.	
			Total.	Per Acre.
	No.	acres.	tons.	lb.
1928-29 ... ..	689	87,686	4,049	103
1930-31 ... ..	371	19,254	1,047	122
1935-36 ... ..	3,426	351,209	16,736	107
1936-37 ... ..	4,836	677,879	30,944	102
1937-38 ... ..	5,267	875,730	40,880	105
1938-39 ... ..	5,377	823,439	37,923	103
1939-40 ... ..	4,850	650,134	30,465	105
1940-41 ... ..	5,022	755,416	34,553	103
1941-42 ... ..	3,933	631,949	27,942	99
1942-43 ... ..	3,950	399,649	16,419	92
1943-44 ... ..	4,055	347,229	12,407	81
1944-45 ... ..	4,576	347,005	13,694	88
1945-46 ... ..	5,346	462,959	19,044	92

Information regarding assistance provided by the Commonwealth Government for the purchase of fertiliser and war-time control of supplies are shown in the chapter "Agriculture."

The following table shows the area of pastures treated with fertilisers in each division in 1935-36 and later years:—

TABLE 354.—Pastures Treated with Fertilisers in Divisions, 1935-36 to 1945-46.

Season.	Coastal.	Tablelands.	Western Slopes.	Plains and Riverina.	Western Division.	New South Wales.
<i>Area of Pastures treated with Artificial Fertilisers.</i>						
	acres.	acres.	acres.	acres.	acres.	acres.
1935-36 ...	29,568	89,491	174,796	53,954	3,400	351,209
1936-37 ...	36,442	251,357	295,407	94,588	85	677,879
1937-38 ...	44,969	344,111	365,484	121,131	35	875,730
1938-39 ...	47,660	307,540	368,413	99,776	50	823,439
1939-40 ...	55,859	301,185	235,269	57,610	211	650,134
1940-41 ...	59,455	324,878	291,002	79,859	222	755,416
1941-42 ...	32,321	243,627	289,519	66,227	255	631,949
1942-43 ...	39,592	139,094	177,267	42,927	769	399,649
1943-44 ...	45,373	93,315	151,638	56,835	68	347,229
1944-45 ...	64,245	90,976	123,077	68,530	177	347,005
1945-46 ...	85,959	141,411	169,770	65,640	179	462,959
<i>Quantity of Fertilisers used on Pastures.</i>						
	tons.	tons.	tons.	tons.	tons.	tons.
1935-36 ...	1,891	5,000	7,627	2,127	91	16,736
1936-37 ...	2,280	11,780	13,235	3,637	12	30,944
1937-38 ...	2,829	16,440	16,626	4,979	6	40,880
1938-39 ...	3,189	14,932	15,635	4,166	1	37,923
1939-40 ...	3,860	13,784	10,259	2,550	11	30,464
1940-41 ...	3,999	14,880	12,314	3,346	14	34,553
1941-42 ...	2,208	11,121	11,989	2,601	24	27,943
1942-43 ...	2,294	5,777	6,665	1,637	46	16,419
1943-44 ...	2,375	3,447	4,775	1,808	2	12,407
1944-45 ...	3,585	3,324	4,367	2,410	8	13,694
1945-46 ...	4,947	5,961	5,519	2,610	7	19,044

## CONSERVATION OF FODDER.

The conservation of fodder is beneficial to the maintenance of herds and flocks during winter months when the growth of grass is retarded and is a necessary safeguard against the periods of deficient rainfall which recur from time to time.

Much educative work has been done by the Department of Agriculture and farmers' organisations to foster the practice of fodder conservation, and advice is given regarding methods of making silage and the construction of silos and silage pits.

In August, 1943, the New South Wales Stock Feeds Conservation Committee was set up to conduct and co-ordinate fodder conservation schemes. The Committee, which comprises representatives of the State Treasury, the Department of Agriculture and of primary producers, allocates advances (effected through the Rural Industries Agency of the Rural Bank) under a stock feeds conservation scheme inaugurated in October, 1944. The advances are repayable over periods of three years (short term) and fifteen years (long term) and are available to rural co-operative societies as well as to individual farmers.

Short term advances are made against fodder already conserved, ranging from 17s. 6d. per ton for ensilage in dairying districts and 10s. per ton in inland areas, to 35s. per ton for baled hay and from 2s. to 3s. per bushel for grain; for sinking pit or trench silos and for pasture improvement; and to co-operative dairy and rural co-operative societies (up to £1,000) for the purchase of hay, grain and food concentrates. The works for which long term loans are granted include overhead silos, sheds, etc., and approved fodder storage facilities for co-operative societies.

The production of hay and the quantity of silage made in recent years are shown below; also particulars of stocks of hay and silage on farms as shown by farmers' returns as at 31st March in each year:—

TABLE 355.—Production and Stocks of Hay and Silage, 1936-37 to 1945-46.

Year ended 31st March.	Production during Year.		Stocks on 31st March.	
	Hay.	Silage Made.	Hay.	Silage.
	tons.	tons.	tons.	tons.
1937 ... ..	917,499	113,542	719,961	199,549
1938 ... ..	825,309	109,628	496,809	173,636
1939 ... ..	1,181,264	124,496	744,550	144,493
1940 ... ..	965,678	173,220	987,332	227,800
1941 ... ..	617,264	138,407	676,563	235,962
1942 ... ..	716,000*	64,145	511,833	134,230
1943 ... ..	985,743	71,801	698,332	127,434
1944 ... ..	735,641	58,143	522,294	100,859
1945 ... ..	371,153	39,830	189,986	54,268
1946 ... ..	990,747	73,598	504,521	73,371

\* Partly estimated.

The decline in the production and stocks of hay and silage in recent years was due to shortage of farm labour and, particularly in 1944-45, to adverse seasonal conditions.

The number of holdings where hay was stored was 12,161 in March, 1944, 9,020 in 1945 and 12,304 in 1946, and the number with stocks of silage was 1,091, 771 and 931 in these years.

The following table gives particulars of silage made in districts since 1921-22. The quantity of silage made in 1944-45 was the smallest since 1929-30, but more was made in 1945-46 than in any of the four preceding seasons.

TABLE 356.—Silage made, 1921-22 to 1945-46.

Period.	Farms on which Made.	Silage Made.	Silage made in Districts.				
			Coastal.	Table-lands.	Western Slopes.	Plains and Riverina.	Western Division.
Average—	No.	tons.	tons.	tons.	tons.	tons.	tons.
1922-26 ...	189	24,252	11,396	3,494	6,760	2,422	180
1927-31 ...	447	42,937	19,270	4,030	15,064	4,320	253
1932-36 ...	927	77,375	46,509	6,226	17,760	5,750	1,130
1937-41 ...	1,503	131,859	78,356	10,123	26,126	17,002	252
1942-46 ...	963	61,503	37,976	5,832	13,522	3,799	374
Season—							
1930-31 ...	669	60,172	26,576	4,646	23,505	5,320	125
1935-36 ...	1,311	109,731	77,131	7,452	18,513	5,135	1,500
1937-38 ...	1,399	109,628	86,762	7,095	12,996	2,775	...
1938-39 ...	1,476	124,496	75,682	10,328	25,848	12,638	...
1939-40 ...	1,743	173,220	52,815	16,329	59,433	43,553	1,090
1940-41 ...	1,546	138,407	96,742	9,525	13,429	18,591	120
1941-42 ...	820	64,145	44,416	4,760	10,264	3,137	1,568
1942-43 ...	1,129	71,801	41,381	7,311	18,086	4,763	260
1943-44 ...	947	58,143	37,101	4,031	13,844	3,150	17
1944-45 ...	811	39,830	29,435	2,601	5,385	2,393	16
1945-46 ...	1,110	73,598	37,548	10,456	20,030	5,554	10

#### CONSERVATION OF THE SOIL.

The problem of deterioration of rural lands by erosion has been given increased attention in recent years. Much of the more fertile surface soil has been removed by the action of rain and wind, followed in some cases by the development of substantial gully systems. In this way considerable areas have been rendered practically useless and other lands have lost in productivity in varying degree. The destruction of trees and shrubs and the over-stocking of pastures in the Western Division has caused the desiccation of surface soils, permitting shifting and denudation and the replacement of the more nutritious native vegetation by inferior herbage. A survey of the vegetation of this Division has been completed and the problems of land utilisation and soil conservation in this vast region are being investigated.

A survey showed that about 70 per cent. of the Western Division is affected by wind erosion with much of this eroded area beyond economic reclamation. Roughly one-half (or 93,700 square miles) of the Eastern and Central Divisions shows no appreciable erosion; approximately 87,650 square miles are affected in varying degree, viz., about 900 square miles very severely eroded, with extensive gullies, some 30,200 square miles moderately eroded with occasional severe gully erosion, about 36,900 square miles showing sheet erosion, nearly 1,000 square miles severely wind eroded and 18,650 square miles affected with wind erosion in minor degree.



The Department of Conservation, controlled by the Minister for Conservation, was established on 8th June, 1944, to co-ordinate the activities of existing State services concerned with conservation problems. These are the Water Conservation and Irrigation and Forestry Commissions and the Soil Conservation Service. The last-mentioned service, constituted under the Soil Conservation Act, 1938, is administered by a Director subject to the Minister's control. The Service has power to investigate all phases of erosion and to conduct educational campaigns, and demonstrations of erosion control. There are local offices at Wagga Wagga, Goulburn, Orange, Seone, Tamworth and Inverell to control conservation work in their respective zones, and to bring the officers of the service in close contact with landholders.

There are research stations at Wagga Wagga, Cowra, Wellington, Gunnedah and Inverell (districts of severe erosion) where problems such as run-off and soil loss, cropping practices in relation to erosion, and water disposal, are studied. Soil conservation demonstrations have been conducted on private land in various portions of the State. Researches and experimental work are proceeding in the control of coastal sand dunes, the prevention of erosion in catchment areas, the establishment of tree nurseries, and toward regeneration of lands near Broken Hill to mitigate the local dust menace.

Owners of land in recognised catchment areas or notified areas of erosion hazard or tracts of country particularly susceptible to erosional damage may enter into agreements with the Crown and may receive instruction from experts in appropriate programmes of soil conservation. An Amending Act of 1947 provides that with Ministerial approval advances up to 100 per cent. of actual cost may be made to landholders for approved works of soil conservation or erosion mitigation, provided the landholder maintains the work and fulfils conditions imposed in relation to land use, etc. The advances are made through the Rural Industries Agency of the Rural Bank, are repayable in half-yearly instalments over periods up to fifteen years, and bear interest at rates fixed by the State Treasurer. The work may be carried out by the landholder or by the Soil Conservation Service, which also may undertake works for landholders who do not seek the financial assistance of the State. Compulsory action may be taken against owners whose actions or neglect result in the depreciation of adjoining lands, or adversely affect water storages, hydro-electric or irrigation projects. The Catchment Areas Protection Board has been constituted under the Act to regulate the disposal of Crown lands in catchment areas where there is a serious threat of soil erosion. (See page 592.)

#### BUSH FIRE PREVENTION AND CONTROL.

Local councils are authorised in terms of the Local Government Act to make provision for the prevention of bushfires and to organise bushfire brigades as described in the chapter "Local Government"—see page 379.

The number of volunteer Bush Fire brigades was 1,055 in 1946. Each brigade is under the direction of a captain appointed by the council. Town fire brigades under the control of the Board of Fire Commissioners co-operate with the bush fire brigades. Workers' compensation is provided for the benefit of volunteers injured while engaged in fighting a bush fire.

In terms of the Careless Use of Fire Act, penalties may be imposed in cases where property is endangered or damaged as a result of lighting

inflammable material near crops, stacks of grain or hay, etc., or failure to extinguish fires in the open air. The sale and use of wax matches and the use of phosphorus baits for poisoning rabbits are subject to regulation.

#### SETTLEMENT IN DIVISIONS.

Rainfall exerts a decisive effect on the nature of the pursuits and the extent of settlement in the various rural districts of the State, and largely explains their industrial characteristics. In a general way this is illustrated by the diagrammatic maps at pages 8 and 9 of this volume.

Particulars of rural settlement in the five statistical divisions of the State are shown in the following tables; they relate for the most part to the year 1940-41. Similar details are not available for later years, except the number and area of holdings as shown below:—

TABLE 357.—Number and Area of Holdings in Divisions 1942-43 to 1945-46.

Division.	1942-43.		1943-44.		1944-45.		1945-46.	
	No.	Area.	No.	Area.	No.	Area.	No.	Area.
Coastal—		000 acres.		000 acres.		000 acres.		000 acres.
North ... ..	11,605	4,567	11,566	4,699	11,750	4,476	11,764	4,450
Hunter-Manning ... ..	9,077	4,616	9,012	4,730	9,163	4,769	9,066	4,724
Metropolitan ... ..	5,110	288	5,246	271	6,202	284	6,235	280
South ... ..	4,411	2,214	4,364	2,198	4,454	2,176	4,366	2,163
Total ... ..	30,203	11,685	30,188	11,898	31,569	11,705	31,421	11,617
Tablelands—								
Northern ... ..	3,705	6,593	3,565	6,585	3,579	6,636	3,538	6,555
Central ... ..	7,077	7,710	7,059	7,817	7,116	7,749	7,070	7,738
Southern ... ..	3,180	5,704	3,116	5,557	3,111	5,516	3,091	5,455
Total ... ..	13,962	20,007	13,740	19,959	13,806	19,901	13,699	19,748
Western Slopes—								
North ... ..	4,213	8,271	4,198	8,293	4,190	8,230	4,188	8,250
Central ... ..	4,287	6,968	4,259	6,930	4,261	6,927	4,265	6,916
South ... ..	7,789	9,772	7,703	9,764	7,732	9,609	7,696	9,520
Total ... ..	16,289	25,011	16,160	24,987	16,183	24,766	16,149	24,686
Central Plains—								
North ... ..	1,902	7,593	1,879	7,640	1,900	7,774	1,888	7,699
Central ... ..	2,351	13,580	2,332	13,538	2,322	13,876	2,270	13,816
Riverina ... ..	6,930	16,814	6,773	16,513	6,786	16,379	6,738	16,260
Total ... ..	11,183	37,987	10,984	37,691	11,008	38,029	10,896	37,775
Western—								
East of Darling ... ..	1,195	33,211	1,244	33,179	1,238	32,363	1,245	32,577
West of Darling ... ..	747	43,153	758	44,164	762	43,316	763	42,977
Total ... ..	1,942	76,364	2,002	77,343	2,000	75,679	2,008	75,554
Total, N.S.W. ... ..	73,579	171,054	73,074	171,878	74,566	170,080	74,173	169,380

*Coastal Districts.*

The following table presents a summary of the tenure and extent of occupied holdings in the four main divisions of the coastal belt as at 31st March, 1941 :—

TABLE 358.—Rural Holdings in Coastal Districts, 1941.

Division of Coast.	Total Area of Division.	Land occupied in Holdings of One acre and upwards for Agricultural and Pastoral Purposes.						
		Holdings of One acre and upwards.	Alienated.*	Leases from the Crown with—		All Other Crown Leases.	Total.	Area of Land suitable for Cultivation.
				Full rights of Conversion.	Limited rights of Conversion.			
	acres.	No.	acres.	acres.	acres.	acres.	acres.	acres.
	000		000	000	000	000	000	000
North ... ..	8,965	11,720	3,337	631	90	674	4,732	608
Hunter-Manning ... ..	8,396	9,091	4,110	513	63	92	4,778	492
Metropolitan ... ..	958	4,966	272	6	...	1	279	160
South ... ..	5,968	4,505	1,785	220	45	230	2,280	469
Total ... ..	22,287	30,282	9,504	1,370	198	997	12,069	1,729

\* See footnote, page 381.

Apart from the small area in the county of Cumberland which surrounds the metropolis, the North Coast is by far the most closely-settled part of the Coastal Division. The average area of holdings in the various divisions in 1941 was:—North Coast, 404 acres; Hunter and Manning, 526 acres; and South Coast 506 acres. The proportion of the total area occupied in holdings as defined was 68 per cent. in the North Coast Division, 57 per cent. in Hunter and Manning, but only 38 per cent. on the South Coast.

Owing to the rugged nature of the country only a small proportion of the land is considered suitable for cultivation, and of this area slightly more than one-fifth was cultivated in 1940-41.

In 1940-41 there were in the coastal districts 2,412 holdings, on which 3,089 share-farmers cultivated 45,406 acres and used 730,528 acres as dairy farms. Of the holdings with share-farmers, 1,937 were used for agriculture and dairying in combination, 135 for agriculture exclusively and 340 for dairying only.

The following analysis shows the main purposes for which the holdings in the coastal districts were used in 1945-46 :—

TABLE 359.—Uses of Rural Holdings in Coastal Districts, 1945-46.

Principal Purpose for which Holdings were Used.	North Coast.	Hunter and Manning.	Metropolitan.	South Coast.	Total.
Number of Holdings.					
Agriculture ... ..	1,693	1,402	2,224	439	5,758
Dairying ... ..	5,316	3,459	411	1,889	11,075
Grazing ... ..	1,552	1,849	93	1,146	4,640
Agriculture and dairying ... ..	2,053	730	49	193	3,025
Agriculture and grazing ... ..	390	280	11	104	785
Dairying and grazing ... ..	397	395	9	84	885
Agriculture, dairying, and grazing ... ..	137	75	1	6	219
Poultry ... ..	21	423	2,615	207	3,266
Pigs ... ..	6	33	78	27	144
Unoccupied, or used mainly for other purposes ... ..	199	420	744	261	1,624
Total ... ..	11,764	9,066	6,235	4,356	31,421

The coastal district contained approximately 91 per cent. of the holdings used for dairying only in New South Wales, and the North Coast district contained 48 per cent. of the number in the Coastal Division. Dairying separately or in conjunction with other farming pursuits is the predominant industry, but a considerable proportion of the farms is used for grazing cattle.

#### *Tablelands.*

Although extensive plateaux exist in the Tableland Divisions, considerable areas are rugged and rock-strewn and not adaptable to agriculture. Hence grazing has remained the staple industry, although many farmers combine agriculture with grazing, and large areas are cultivated in suitable localities. The rainfall is ample throughout, and the headwaters of most of the principal rivers make this a well-watered region. Railway communications are good, but, except on the Central Tableland, settlement is sparse, fewer flourishing towns exist than on the coast, and small settlements are rarer because lands suitable for intense farming are more scattered. Neither dairying nor agriculture has been developed to any appreciable degree, but pastoral pursuits are extensive.

The following table provides an analysis of the number and tenure of rural holdings in the three main divisions of the Tablelands as at 31st March, 1941:—

TABLE 360.—Rural Holdings on Tablelands, 1941.

Division of Tableland.	Total Area of Division.	Land occupied in Holdings of one acre and upwards for Agricultural and Pastoral Purposes.						
		Holdings of one acre and upwards.	Alienated.*	Leases from the Crown with—		All other Crown Leases.	Total.	Area of Land suitable for Cultivation.
				Full rights of Conversion.	Limited rights of Conversion.			
	acres.	No.	acres.	acres.	acres.	acres.	acres.	acres.
	000		000	000	000	000	000	000
Northern ...	8,069	3,661	4,614	1,461	195	338	6,608	581
Central ...	10,716	7,269	6,333	1,050	142	233	7,758	2,060
Southern ...	7,062	3,214	4,248	788	105	725	5,866	644
Total ...	25,847	14,144	15,195	3,299	442	1,296	20,232	3,285

\* See footnote, page 381.

While the proportion of land occupied varies from approximately 82 per cent. in the northern and southern to 72 per cent. in the central tablelands, rural settlement is most dense in the central districts, which were the first to be occupied. Nearly 60 per cent. of the total area of the Tableland Division is alienated, and one-quarter of the area occupied is leased from the Crown. As in the Coastal Division, the proportion of land suitable for cultivation is very small, less than 19 per cent. of such land being cropped in 1940-41. There were 630 share-farmers on 495 holdings, comprising 95,016 acres of cultivation and 14,857 acres of dairy farms in the Tableland Division in 1940-41. Of the holdings with share-farmers, 443 were used for agricultural purposes only, 12 for dairying only and 40 for agriculture and dairying together.

The main purposes for which holdings were used in each division of the tablelands in 1945-46 are shown in the following table:—

TABLE 361.—Uses of Rural Holdings on Tablelands, 1945-46.

Principal Purpose for which Holdings were used,	Northern Tableland.	Central Tableland.	Southern Tableland.	Total.
[Number of Holdings.]				
Agriculture ... ..	261	1,088	43	1,392
Dairying ... ..	176	208	44	428
Grazing ... ..	1,862	2,889	2,467	7,218
Agriculture and Dairying ... ..	86	139	8	233
Agriculture and Grazing ... ..	851	2,159	390	3,400
Dairying and Grazing ... ..	105	61	48	214
Agriculture, Dairying, and Grazing ... ..	62	95	16	173
Poultry, Pigs, etc. ... ..	23	124	16	163
Unoccupied or used for other purposes ... ..	112	307	59	478
Total ... ..	3,538	7,070	3,091	13,699

Grazing pursuits predominate throughout, but a considerable proportion of the holdings is used for agricultural purposes. There was a temporary increase in dairying during the depression, and the number of registered dairies in the Tableland Division rose from 1,332 in 1929-30 to 1,967 in 1934-35. The number was 1,202 in 1943-44, 1,139 in 1944-45, and 1,070 in 1945-46.

#### *Western Slopes.*

The divisions of the Western Slopes contain gently undulating lands with a westerly trend, watered by the upper courses of the inland rivers, and an adequate and regular rainfall. These fertile areas are eminently suitable for agriculture and are, with the Riverina, the most productive portions of the interior.

The area, number, and tenure of rural holdings in the various divisions of the Western Slopes as at 31st March, 1941 are shown below:—

TABLE 362.—Rural Holdings on Western Slopes, 1941.

Division of Slopes.	Total Area of Division.	Area of Land occupied in Holdings of one acre and upwards for Agricultural and Pastoral purposes.						
		Holdings of one acre and upwards.	Alienated.*	Leases from the Crown with—		All other Crown Leases.	Total.	Area of Land suitable for Cultivation.
				Full rights of Conversion.	Limited rights of Conversion.			
	acres. 000	No.	acres. 000	acres. 000	acres. 000	acres. 000	acres. 000	acres. 000
North-Western	9,219	4,265	6,937	1,062	222	123	8,344	2,295
Central-Western	7,723	4,370	6,349	494	33	93	6,969	4,669
South-Western ...	11,239	7,948	8,779	347	31	865	10,022	5,466
Total ...	28,181	16,583	22,065	1,903	286	1,081	25,335	12,430

\* See footnote, page 381.

In these divisions settlement is most dense on the South-western Slope, but the proportion of occupied land is greatest in the northern districts. The proportion of land occupied in the Slopes is 90 per cent. of the total area of the whole division. The area of land suitable for cultivation is considerable, constituting 40 per cent. of the total area of such land in the State. Of the land under rural occupation and considered suitable for cultivation in the Slopes Division approximately 26 per cent. was under crop in 1940-41.

There were 2,886 share-farmers on 2,259 holdings on the Western Slopes in 1940-41, cultivating 776,279 acres and using 43,316 acres for dairying. Of these holdings 71 were devoted exclusively to dairying, 2,103 entirely to agriculture and 85 to dairying and agriculture in combination.

The following statement shows the principal purposes for which rural holdings were used in the Western Slopes Division in 1945-46:—

TABLE 363.—Uses of Rural Holdings on Western Slopes, 1945-46.

Principal Purpose for which Holdings were used.	North-Western Slope.	Central-Western Slope.	South-Western Slope.	Total.
	Number of Holdings.			
Agriculture ... ..	345	372	755	1,472
Dairying ... ..	93	48	389	530
Grazing ... ..	1,480	734	2,147	4,361
Agriculture and Dairying ... ..	77	41	142	260
Agriculture and Grazing ... ..	1,871	2,855	3,304	8,030
Dairying and Grazing ... ..	9	3	199	211
Agriculture, Dairying, and Grazing...	33	53	322	408
Poultry, Pigs, etc. ... ..	145	49	127	321
Unoccupied or used for other purposes ... ..	135	110	311	556
Total ... ..	4,188	4,265	7,696	16,149

Mixed farming—agriculture and grazing—is the principal rural activity, but grazing predominates on the North-Western Slope, and small farming is not extensive. Developments in dairying have been mainly in the South-Western Slope about Tumut. Dairying was conducted on only 7.8 per cent. of the holdings of the Western Slopes in 1927-28, on 9.8 per cent. in 1944-45 and on 8.7 per cent. in 1945-46.

#### *Plains and Riverina.*

The Plains of the Central Division, including the Riverina, constitute the eastern portion of a remarkable extent of almost level country, stretching from the last hills of the Western Slopes to the western boundary of the

State. With an average width of 120 miles, they comprise the great sheep districts of the State and about 40 per cent. of the agricultural lands. Generally speaking, they are not well watered, the average rainfall is low, and its intermittency is a source of frequent loss. They are traversed by the western rivers in their lower courses, but these do not supply water to a very extensive area, as they are few and their flow is irregular. Schemes of irrigation, however, have greatly increased the productive capacity of these inland areas. Artesian water underlies a considerable area on the north, and bores supply permanent water in a number of localities. In the south sub-artesian bores are of great practical utility.

The following table shows the number, tenure, and extent of holdings occupied for agricultural and pastoral purposes in the division on 31st March, 1941:—

TABLE 364.—Rural Holdings on Plains and Riverina, 1941.

Plains of Central Division.	Total Area of Division.	Area of Land occupied in Holdings of one acre and upwards for Agricultural and Pastoral Purposes.						
		Holdings of one acre and upwards.	Alienated.*	Leases from the Crown with—		All other Crown Leases.	Total.	Area of Land suitable for Cultivation.
				Full rights of Conversion.	Limited rights of Conversion.			
	000 acres.	No.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.
North ...	9,579	1,934	5,754	1,631	238	130	7,753	2,163
Central ...	14,811	2,472	10,660	2,382	163	733	13,938	3,667
Riverina ...	17,004	7,168	14,285	1,033	90	1,218	16,626	7,355
Total ...	41,394	11,574	30,699	5,046	491	2,081	38,317	13,185

\* See footnote, page 381.

The existence of a closely-settled but comparatively small area of irrigated lands in the Riverina partly accounts for the density of settlement in that division. At 31st March, 1941, there were 1,346 holdings in the Murrumbidgee Irrigation Area embracing 300,776 acres inclusive of certain attached lands outside the Irrigation Area. Eighty per cent. of the area occupied in the Central Plains and Riverina Division had been alienated. The proportion alienated was 74 per cent. of the total area occupied in the northern districts, 77 per cent. in the Central Plains, and 86 per cent. in the Riverina, where the land is more productive.

The area of Crown lands occupied is considerable in all divisions.

Share-farming is not extensive in the north, but in the Riverina 801 holdings employed 1,029 share-farmers, who had 290,398 acres in cultivation and used 2,353 acres for dairying in 1940-41.

Only 21 per cent. of the occupied rural land in the Northern and 26 per cent. in the Central Plains is considered suitable for agriculture, but the proportion in the Riverina is 44 per cent. Approximately 16 per cent. of the land in the Central Plains and Riverina was under crops in 1940-41.

The main purposes for which the holdings in the Central Plains and Riverina Divisions were used in 1945-46 are shown in the following table:—

TABLE 365.—Uses of Rural Holdings on Plains and Riverina, 1945-46.

Principal Purpose for which Holdings were used.	Northern Plains.	Central Plains.	Riverina.	Total.
	Number of Holdings.			
Agriculture ... ..	54	35	1,332	1,421
Dairying ... ..	17	12	82	111
Grazing ... ..	937	1,599	1,359	3,895
Agriculture and Dairying ... ..	2	1	51	54
Agriculture and Grazing ... ..	808	592	3,403	4,803
Dairying and Grazing ... ..	...	2	25	27
Agriculture, Dairying, and Grazing ... ..	2	2	224	228
Poultry, Pigs, etc. ... ..	16	1	39	56
Unoccupied or used for other purposes...	52	26	223	301
Total ... ..	1,888	2,270	6,738	10,896

While grazing, with mixed farming and agriculture, prevails in the northern districts, agriculture, combined with grazing, predominates in the Riverina. On the irrigated lands of the Murrumbidgee many holdings are used for small farming, and in the Riverina there were 3,723 holdings on which wheat for grain was grown in 1945-46.

#### *Western Division.*

The plains of the Western Division probably never will be developed into a productive region maintaining a population commensurate with their area. One-third of the division receives, on the average, less than 10 inches of rain per year and practically the whole of the remainder less than 15 inches. Though the soils are uniformly fertile, the lack of rain and of permanent water and grasses, and the high rate of evaporation, ranging up to 90 inches per year, render it relatively unproductive. Except on a few small irrigated areas there is little agriculture or dairying, and by reason of the small rainfall, the sheep-carrying capacity of the land is only about one-fifth as great as that of the plains further east; but the climate is well suited to the production of high-grade merino sheep. It is a lonely region, for the most part occupied in large holdings on a long or perpetual lease tenure. It presents an immense field for scientific development, but its possibilities are problematical. Whether irrigation from the Murray and the vast lake reservoirs of the South Darling, combined with dry-farming methods, will render any extensive areas adaptable to agriculture, or whether water and fodder conservation will render it capable of maintaining large numbers of sheep and suitable for closer settlement, remain questions which are not likely to be considered until settlement in the more attractive easterly regions has made very great advance. It was contended, however, that in the south large areas only required railway facilities to render them profitable for agriculture, but results so far attained are not encouraging. At present, excluding the mining districts, it is a vast region comprising two-fifths of the area of the State, producing less than one-sixth of the pastoral produce, and practically nothing besides, and inhabited by less than 20,000 persons



(one person to 6 square miles) or less than one per cent. of the State's population. Near the western boundary, however, is situated one of the richest silver-lead fields of the world, and in the large mining town of Broken Hill there is a population of about 27,000 persons.

The total area returned by occupiers as alienated land in the rural holdings in the Western Division as at 31st March, 1941, was 15,731,152 acres.

Of the total area occupied—nearly 78 million acres in 1940-41 and over 75,500,000 acres in 1945-46—the area under crop was only 14,745 acres and 20,072 acres, respectively, although in 1941 an aggregate area of 1,193,206 acres was considered by the occupiers to be suitable for cultivation.

#### ADMINISTRATION.

The Department of Agriculture of New South Wales was created in 1890. It is under the control of the Minister for Agriculture, with a permanent Under Secretary and Director. The administrative functions of the Department extended to all rural industries, but not to forestry, which is administered by a separate Commission.

The Department of Agriculture administers policy and Acts of Parliament relative to rural industries, and by scientific investigation and experiment and dissemination of information, promotes improved methods of cultivation, possible new crops, means of combating pests, the use of fertilisers, irrigation, and better marketing and transport of produce. It promotes marketing schemes and fosters a community spirit among farmers.

For each branch of rural industry there is a scientific staff. The various branches were reorganised in September, 1940 into seven divisions, as follows:—

*Plant Industry.*—Experiment farms, field investigations, agrostology, plant breeding and tobacco growing.

*Horticulture.*—Fruit development and viticulture.

*Animal Industry.*—Animal health and livestock production services, relating to sheep and wool, herds, pigs, poultry and bees.

*Dairying.*—All activities relating to dairy products.

*Science Services.*—Agricultural biology and chemistry, botany and entomology.

*Marketing and Agricultural Economics.*—State Marketing Bureau and agricultural economics.

*Information and Extension Services.*—Publications, library and a service to assist in co-ordinating instructional activities.

The Council for Scientific and Industrial Research, a Commonwealth organisation, is active in the investigation of agricultural problems and the Commonwealth Departments of Commerce and Agriculture and of Trade and Customs, in co-operation with the States, exercise functions affecting overseas marketing of products and assistance to producers. Co-operative organisations of the farmers themselves are also instrumental in fostering efficiency of rural enterprise.

The Australian Agricultural Council, established in 1935, is a permanent organisation set up with a view to promoting uniformity of action between

Commonwealth and States in relation to questions of marketing and agricultural problems. The Council consists of the Ministers in charge of agricultural administration in the States and the marketing and agricultural administration of the Commonwealth; other State or Federal Ministers may be co-opted. A permanent technical committee, known as the Standing Committee on Agriculture, advises the Council and guides its deliberations. Its members comprise the permanent heads of State Departments of Agriculture, members of the executive committee of the Council for Scientific and Industrial Research, the Secretary of the Department of Commerce and Agriculture, the Commonwealth Director-General of Health, and the Director-General of Agriculture.

#### *Commonwealth Food Control.*

War-time organisation and control of rural production was developed by the Commonwealth authorities, acting in co-operation with the States, and the State Departments of Agriculture formed the administrative link with primary producers.

The outbreak of war in the Pacific brought added demands for supplies of food, and the Australian Food Council, consisting of the Minister for Supply and Shipping, as chairman, and representatives of the Departments concerned, was formed early in 1942 to determine a common national policy in relation to production and procurement of supplies. In November, 1942, a Director-General of Agriculture within the Department of Commerce was appointed to co-ordinate the agricultural activities of the various States, and later, sections of the Commonwealth Cabinet—the Production Executive and the Food Executive—took over the functions of the Food Council. In May, 1943, a single agency—the Commonwealth Food Control—was created to deal with all problems of food production and supply.

#### *War Agricultural Committees.*

The War Agricultural Committee organisation operated from July, 1942 to March, 1946. It was established to deal with problems arising from scarcity of rural labour and its functions were extended later to other matters affecting rural production and the attainment of the production goals set by the Commonwealth authorities concerned with supplies of food.

In New South Wales—as in other States—there was a State Committee, with an executive officer, and District and Local Committees. Each district committee worked under the control of the State Department of Agriculture; the chairman was a District Officer of the Department, and other members represented urban and rural interests in the district. The district committees set up local committees representing the farmers in the various localities or subsidiary committees to deal with particular industries. Forty-eight district and 1,300 local committees functioned in New South Wales.

It was the function of the District Committees to stimulate production and to ensure that efficient use was made of available resources of labour, machinery, fertilisers, etc. They advised the central executive as to labour requirements, the release and distribution of supplies and equipment needed by the farmers, and supervised arrangements for the accommodation and transport of farm labour.

*Commonwealth Rural Reconstruction Commission.*

The Rural Industries Commission in the Ministry for Post-war Reconstruction was appointed in February, 1943 as a Board of Inquiry to report upon the organisation of Australian rural economy for purposes of the effectual prosecution of the war and post-war reconstruction, the efficiency of methods of production, distribution and marketing of primary products and the conservation and development of natural resources.

Eight reports were submitted and published between January, 1944 and December, 1945. A brief summary of the conclusions and recommendations contained in the first to the fourth reports is given at pages 636 and 637 of the 1941-42 and 1942-43 edition of the Year Book. These reports reviewed the basis of the Australian rural economy and the factors affecting its future; the settlement and employment of returned members of the forces; the basic principles of land utilisation in Australia; and the problems of the financial and economic reconstruction of farms.

In its fifth report dated 28th February, 1945, the Commission dealt with capital requirements and rural credit. It found continuity of supply, suitable conditions and credit-worthy objects to be the main requirements of the rural credit system. Farm productive capacity rather than selling value should be the basis of credit, and the supply of credit should not exclude other means of assisting financially embarrassed farmers. The merits and demerits of existing credit agencies (private financing, government, and traders) were examined.

It was recommended that the Commonwealth and the States undertake (1) the provision of rural bank services on the branch system affording general banking facilities and having a development and reconstruction agency which should make fixed long-term and overdraft loans at concession rates for approved new farm enterprises, the reconstruction of financially embarrassed farmers, for reconstruction of uneconomic farms, and to finance compulsory and voluntary debt adjustments; (2) to transfer administration of existing government rural credit schemes to the rural bank; and (3) to co-ordinate activities of State rural banks and the central bank. Crown lands should be sold for cash and not on terms (the buyer using rural bank credit). The practice of supplying supplementary farm credit from public funds should cease. For goods purchased by farmers on terms, the seller should be required by law to state the cash price and the annual rate of interest included in the instalment payments. The Commission considered that the desirability of applying the principles of the English Agricultural Credits Act, 1928 in Australia should be investigated.

Study of the factors affecting farm efficiency and costs, dealt with in the Sixth report dated 11th April, 1945, suggested that to secure needed greater efficiency in Australian rural industries, farm mechanisation is necessary; farms should be large enough for economical use of machinery, as it appeared that its co-operative use for small units was not entirely satisfactory. Research into the use and standardisation of farm machinery is required, and each State should provide a capable extension service to promote and guide its use on farms. Appropriate development of facilities for technical education is needed in all stages from primary schools to agricultural colleges and the standard of training of extension workers should be improved.

The Commission urged greater co-ordination, to give agricultural policy a clear national basis, in methods of administration, recruitment and

training of technical staff, and in national research projects. Before applying farm controls the aim should be to give farmers an understanding of the problems involved. The policy of raising prices by artificial means (e.g., home consumption price) was considered unwise. As possible means of reducing farm costs the Commission endorsed co-operative buying and processing; indicated ways of making co-operative societies more efficient, and recommended continuous oversight of prices, including those for fertiliser, and at least temporarily, the stabilisation of the price of phosphatic rock by subsidy. Subsidies for the transport of farm products should be avoided, but transport services (including port facilities) should be better developed and co-ordinated. Taxing systems as affecting rural enterprise should be reviewed. To attract and hold labour of desirable quality the Commission recommended that a rural needs basic wage with appropriate margins for skill be payable to all capable farm workers; the minimum rates for particular industries to be the basic rate or higher according to their prosperity. Casual farm workers should be paid at rates higher than those of permanent employees.

Dealing with rural amenities in its Seventh report dated 18th May, 1945, the Commission found that poor housing, limited educational facilities, isolation, inadequate health and medical services and lack of amenities (water supply, electricity, amusements, etc.) accentuated the tendency for country people to drift to the cities and larger towns. These are matters mainly under State and local administration, but the problems of ensuring healthy and vigorous rural development are national; hence the recommendation for the setting up of a small expert committee to explore avenues and means of Commonwealth assistance in meeting them. The view was taken that apart from water and electricity supply and health and education services, rural amenities should come as a result of individual and community interest which it should be the aim of governments to stimulate. A sound basis for the decentralisation of industry (to the mutual benefit of town and countryside) should be given rural towns with promise of development by providing adequate water, sewerage, drainage, electricity and housing schemes, town planning and the development of community centres.

The Eighth report, dated 11th December, 1945, dealt with irrigation, water conservation and land drainage. In the Commission's opinion Australia's limited potentialities for irrigation should be developed on a long-term, co-ordinated, national basis (much of the cost of water storage and reticulation works falling on public funds), with hydro-electricity schemes in a subordinate and ancillary place. Examination of engineering and land utilisation problems, including economic prospects of proposed industries, should precede development, and only such irrigation projects as would help stabilise existing successful industries, or foster those with good economic prospects, should be undertaken. Stock and domestic water supply schemes for the drier regions were in this category.

To make the most of the limited resources of water, State authorities should control land use on catchment areas, steps should be taken to minimise loss of water in distribution, the water supplied should be measured to avoid waste on farms, irrigators should have the help of local advisory officers in deciding quantities needed, and irrigation area boundaries should be based on soil surveys. The possible use of sub-artesian water by means of large-scale pumping schemes based upon geological surveys needs investigation. To stabilise the diminishing supplies from artesian bores steps should be taken to control their flow, to limit their use

to actual requirements for watering of stock, and for the use of piping or treated channels to reduce loss in reticulation.

Land drainage to promote productivity should be stimulated by provision of rural credit and of an adequate advisory service, coupled with research into mechanical methods of construction.

Because of their national significance, the Commission reported upon propositions for watering inland Australia (Dr. Bradfield's scheme) and for utilising the waters of the Snowy River and of the Ord River in the Eastern Kimberleys.

#### RURAL FINANCE.

The problem of promoting effective rural settlement in New South Wales is associated closely with that of rural finance. Substantial investment is necessary for the proper development of rural holdings and temporary financial assistance must be provided for rural producers, particularly in periods of drought and low prices.

Active measures have been taken by the State Government from time to time to encourage settlement on the land and to assist settlers in times of adversity. Important among such measures have been the sale of Crown lands by deposit and instalments, the institution of closer settlement and soldier settlement schemes, and the provision of advances on conditions more liberal than are obtainable from the private financial institutions.

The trading banks and pastoral finance companies and other private institutions provide extensive credit facilities for landholders. The loans made by these institutions are usually in the form of overdrafts payable on demand, though in practice many of them continue for a long period. As a general rule security is lodged by the borrower and the amount of overdraft is not fixed but may not exceed a certain limit. Interest is charged on the daily balance of the overdraft.

A Royal Commission appointed to inquire into the Monetary and Banking Systems in operation in Australia reported that in 1936 advances within Australia by nine private trading banks to persons and institutions engaged in agricultural and pastoral industries amounted to £125,000,000 or 47.7 per cent. of the total advances by these banks. At the same time, advances in Australia by twenty pastoral finance companies, mainly to wool growers, amounted to £25,000,000.

Government schemes for the assistance of settlers were administered for the most part by the Departments of Agriculture and Lands until the actual work of administration associated with advances was transferred to the Rural Bank of New South Wales.

#### ADVANCES TO SETTLERS.

In 1899, an Advances to Settlers Board was appointed to make loans to farmers in necessitous circumstances or embarrassed by drought. Advances were limited to £200 for a term of ten years at 4 per cent. interest until 1902, when the powers of the Board were extended, enabling it to make advances to farmers for any approved purpose up to £500, repayable within thirty years. In 1907 the functions of the Board were transferred to the Government Savings Bank and the limit of individual advances was raised to £2,000.

In 1921 the business was organised on an extended scale in the Rural Bank Department of the Savings Bank, and in July, 1933, following the

transfer of the savings bank business to the Commonwealth Savings Bank, the Rural Bank was formed.

*Advances by the Rural Bank of New South Wales.*

The Rural Bank functions through three departments, viz., Rural Bank Department, Advances for Homes Department, and Government Agency Department. In its Agency Department the bank administers certain lending activities on behalf of the State Government, collects charges and principal sums owing and makes new advances in accordance with Government policy. Six of the agencies are concerned with rural finance, viz., Rural Reconstruction, Rural Industries, Advances to Settlers, Irrigation, Closer Settlement, and Guarantee Agencies. Formerly these activities were conducted by other Government departments and bodies, and transfer to the Rural Bank was made to co-ordinate administration.

*Rural Bank Department.*

With the primary object of promoting rural settlement and development this bank affords financial assistance to primary producers. It makes loans either in the form of amortization loans or overdrafts on current accounts. The basis of lending is generally two-thirds of the value of freehold land or certified tenures under the Crown Lands Acts, or three-fourths of the value of improvements on uncertified Crown tenures.

The following tables show the transactions in long term and overdraft loans to farmers, etc., by the Rural Bank (or appropriate Department of the Government Savings Bank) in various years since 1911.

TABLE 366.—Rural Bank—Long Term Loans to Farmers,  
1910-11 to 1945-46.

Year ended 30th June.	Advances made during year.			Balance repayable at end of year.		
	Number.	Total Amount.	Average.	Number.	Total Amount.	Average.
		£	£		£	£
1911 ... ..	838	331,693	395	3,754	1,074,359	286
1913 ... ..	1,386	771,272	556	5,094	2,051,132	403
1915 ... ..	860	387,715	451	5,860	2,514,078	429
1921 ... ..	1,365	813,525	596	7,242	3,423,871	473
1931 ... ..	78	84,675	1,086	7,986	6,520,754	817
1935 ... ..	100	115,115	1,151	7,226	6,520,754	827
1936 ... ..	134	171,130	1,277	6,924	5,974,790	835
1937 ... ..	47	81,179	1,727	6,587	5,779,602	834
1938 ... ..	65	121,895	1,875	6,140	5,074,313	826
1939 ... ..	64	58,481	914	5,858	4,865,241	830
1940 ... ..	71	57,382	808	5,555	4,619,081	831
1941 ... ..	55	57,668	1,049	5,315	4,431,607	834
1942 ... ..	36	31,569	877	5,015	4,240,890	846
1943 ... ..	25	21,033	841	4,675	3,920,601	838
1944 ... ..	11	8,600	782	4,221	3,471,754	822
1945 ... ..	10	8,417	842	3,700	3,028,675	819
1946 ... ..	6	10,331	1,722	3,163	2,560,779	810

TABLE 367.—Rural Bank—Overdrafts to Farmers, 1921-22 to 1945-46.

Year ended 30th June.	Overdraft Limits Authorised during year.			Advances current at end of year.	
	Number.		Amount.	Number.	Amount.
	New.	Additional.			
			£		£
1922 ... ..	1,383	...	980,375	1,364	728,584
1931 ... ..	811	534	486,505	10,650	8,254,745
1932 ... ..	144	99	112,332	9,566	7,857,288
1933 ... ..	196	785	170,908	9,349	7,704,117
1934 ... ..	366	1,532	437,912	9,272	7,758,946
1935 ... ..	714	807	768,648	9,535	8,093,698
1936 ... ..	966	753	1,388,212	9,920	8,783,166
1937 ... ..	873	655	1,201,126	10,049	9,006,533
1938 ... ..	984	744	1,643,516	10,281	9,993,114
1939 ... ..	545	596	847,380	10,170	10,570,803
1940 ... ..	550	433	980,070	10,094	10,930,753
1941 ... ..	447	425	712,270	9,957	11,132,898
1942 ... ..	398	290	663,135	9,842	11,227,375
1943 ... ..	257	140	440,885	9,661	10,686,852
1944 ... ..	327	199	628,685	9,316	10,012,180
1945 ... ..	536	278	953,655	9,061	10,140,510
1946 ... ..	760	379	1,706,705	9,017	10,651,361

*Commonwealth Re-establishment Advances.*

Since 6th February, 1946, the Rural Bank, as lending authority in New South Wales, has administered the granting of re-establishment loans for agricultural purposes to ex-servicemen under the Commonwealth Re-establishment and Employment Act, 1945. Loans are made through the Rural Bank Department up to a maximum of £1,000 and bear interest as follows; the first £50, free of interest; over £50 to £250, 2 per cent.; over £250, 3½ per cent. per annum. Advances made up to 30th June, 1946, numbered 161 for amounts totalling £83,815, and are not included in the statement in Table 366.

*Rural Reconstruction Agency.*

This Agency commenced on 1st March, 1935, and functioned under the name of the Farmers Relief Agency until 22nd November, 1939. It gives effect to the decisions of the Rural Reconstruction Board, which exercises powers as described on page 424 *et seq.*

The main function of the Board is to assist in restoring to a sound basis farmers in financial difficulties who are deemed to have reasonable prospects of carrying on. For this purpose it may authorise advances to enable farmers to effect compositions with private creditors and to enable them to carry on while their affairs are under investigation and after they have received an advance for debt adjustment.

The total amount of capital funds received by the Agency up to 30th June, 1946 included £2,996,017 made available by the Commonwealth Government, viz., £23,017, forming part of a larger loan to the State for drought relief purposes distributed through the Rural Industries Agency, non-repayable grants of £2,253,000 for debt adjustment, and £720,000 for reconstruction of marginal wheat areas.

Particulars of advances in each of the years 1935-36 to 1945-46 are shown below. Advances of similar type made prior to 1935-36, mostly by the Farmers Relief Board in the period 1933 to 1935, amounted to £801,462.

TABLE 368. Rural Reconstruction Agency—Advances to Settlers, 1935-36 to 1945-46.

Year ended 30th June.	Advances.			Revenue Charges, including Interest.	Repayments.		Debts Written Off, and Amounts Waived.	Balance of Indebted- ness at 30th June.
	General.	Debt Adjust- ment.	Marginal Wheat Areas.		Principal.	Revenue Charges.		
	£	£	£	£	£	£	£	£
1936 ... ..	491,723	19,887	.....	26,032	416,106	21,121	3,392	700,461
1937 ... ..	462,529	327,737	.....	30,276	519,847	24,925	7,920	698,311
1938 ... ..	429,906	642,912	.....	42,013	370,224	26,273	35,502	1,651,143
1939 ... ..	413,759	459,108	.....	59,971	265,361	32,071	32,181	2,254,368
1940 ... ..	356,139	330,091	.....	69,707	376,666	48,733	61,636	2,523,270
1941 ... ..	346,925	240,387	4,952	70,866	313,146	51,918	38,908	2,782,428
1942 ... ..	281,157	149,355	22,406	72,869	302,153	56,661	38,164	2,911,237
1943 ... ..	242,583	157,504	106,753	75,886	298,789	72,790	34,127	3,087,767
1944 ... ..	283,130	160,224	110,174	75,411	348,141	72,944	33,145	3,262,466
1945 ... ..	367,713	163,936	224,493	75,247	260,877	50,162	29,622	3,753,194
1946 ... ..	456,032	255,633	156,495	79,510	352,676	66,702	44,388	4,237,098

#### *Rural Industries Agency.*

On 1st July, 1935 the Rural Industries Agency assumed control of various lending activities which were initiated by the Departments of Lands and Agriculture in 1915. These activities had been administered by the Rural Industries Board from December, 1919, and, after its dissolution in 1923, by the Rural Industries Branch of the Department of Agriculture.

The first advances were on a limited scale to assist farmers to cultivate new areas and relieve those in necessitous circumstances. Larger sums were made available later for drought relief and the scope of relief to necessitous farmers was extended generally.

Current advances are made for various purposes to many classes of settlers who are unable to obtain accommodation through the usual commercial channels. Normally advances are made to wheat growers for seasonal requirements pending receipts from the sale of products, to small graziers and dairy farmers for the purchase of improved breeding stock, and to farmers for the eradication of noxious weeds, the growing and conservation of fodder, and the purchase and storing of hay, etc. Occasionally advances are made to farmers, orchardists, poultry farmers, market gardeners and others who have suffered loss from causes such as drought, windstorm or bush fire.

In 1940-41 and 1941-42 special advances were made to settlers whose holdings had been seriously affected by drought. These advances are repayable in periods up to seven years. They are free of interest in the first year, and thereafter interest is chargeable at the rate of  $1\frac{1}{2}$  per cent. per annum. A sum of £1,050,000 was made available, viz., £300,000 by the State Government, and £750,000 by the Commonwealth. The funds provided by the Commonwealth are repayable by the State in four annual instalments, commencing in the fourth year of the loan, with interest at the rate chargeable to settlers.

Advances are made to rural co-operative societies for the purchase and operation of farm machinery as described on page 438.



A summary of the advances to farmers by the Rural Industries Agency since 1935-36 is set out below, together with other operations on borrowers' accounts. Advances by other departments controlling loans of this type during sixteen years preceding the formation of the Agency amounted to £5,500,000 approximately, and repayments of principal to £4,400,000.

TABLE 369.—Rural Industries Agency—Advances to Necessitous Farmers, 1935-36 to 1945-46.

Year ended 30th June.	Advances.	Revenue charges, including Interest.	Repayments.		Debts Written off and amounts Waived.	Balance of Indebtedness at 30th June
			Principal.	Revenue Charges.		
	£	£	£	£	£	£
1936 ... ..	51,383	34,000	45,661	9,782	126,656	1,119,388
1937 ... ..	58,873	31,851	54,486	14,236	89,481	1,051,909
1938 ... ..	84,321	30,497	45,533	9,915	75,001	1,036,278
1939 ... ..	103,331	32,156	45,769	6,751	64,307	1,054,938
1940 ... ..	183,164	32,722	159,122	11,389	64,157	1,036,156
1941 ... ..	489,474	30,551	61,750	10,781	36,943	1,446,707
1942 ... ..	235,781	33,142	121,121	6,345	37,395	1,550,769
1943 ... ..	103,503	34,977	182,864	17,131	73,694	1,415,560
1944 ... ..	125,174	30,477	207,800	16,120	120,542	1,226,749
1945 ... ..	187,703	26,420	122,269	11,256	86,671	1,220,676
1946 ... ..	156,783	22,417	162,825	14,763	144,491	1,077,797

*Advances to Settlers' Agency.*

Since 1st July, 1935, this agency has administered loans first made in 1930-31 from unemployment relief funds and controlled for a period by an Advances to Settlers Co-ordination Board and a Dairy Promotion Board.

Advances are made for permanent improvements on rural holdings and for the purchase of stock and plant by dairy farmers. The main purpose of the advances is to provide employment in rural areas and at the same time assist in the development of rural industries.

Particulars of the advances, etc., in each year since the Agency was established are shown in the following table. Advances in the three years 1933 to 1935, prior to the formation of the Agency, amounted to £900,997.

TABLE 370.—Advances to Settlers' Agency—Advances to Settlers, 1935-36 to 1945-46.

Year ended 30th June.	Advances.	Revenue charges, including Interest.	Repayments.		Debts Written off and amounts Waived.	Balance of Indebtedness at 30th June.
			Principal.	Revenue Charges.		
	£	£	£	£	£	£
1936 ... ..	101,924	27,196	60,673	21,698	2,710	970,953
1937 ... ..	37,898	27,014	84,834	26,154	4,798	920,079
1938 ... ..	30,125	25,271	91,454	20,340	7,303	856,378
1939 ... ..	32,768	23,744	62,346	16,006	3,887	830,151
1940 ... ..	34,419	22,934	60,525	18,365	5,193	803,421
1941 ... ..	25,664	21,917	58,006	16,726	6,071	770,199
1942 ... ..	22,318	20,689	56,393	14,658	7,273	734,882
1943 ... ..	9,827	19,285	67,319	17,908	10,045	668,721
1944 ... ..	14,309	16,909	73,472	18,304	23,997	584,167
1945 ... ..	19,631	14,684	72,602	13,400	20,557	511,923
1946 ... ..	32,001	12,514	90,550	14,400	21,608	429,880

*Irrigation Agency.*

Matters relating to the conservation of water and the development and management of irrigation projects in New South Wales are controlled by the Water Conservation and Irrigation Commission, as described in a later chapter of this Year Book.

On 1st July, 1935, administration of financial transactions between settlers and the Water Conservation and Irrigation Commission was transferred to the Irrigation Agency of the Rural Bank.

The Agency makes loans to settlers in the irrigation areas and collects interest and principal sums in respect of loans and land purchase, rentals, water rates and other charges. It also collects payments to the Crown in respect of debts for shallow bores sunk in various parts of the State and charges for water in domestic and stock water supply and irrigation districts. Under the Farm Water Supplies Act, 1946, the agency may lend, for terms up to fifteen years, up to 90 per cent. of the actual cost of approved works for providing or improving water supplies on farms and for preparing land for irrigation. (See page 499.)

Advances made by the Irrigation Agency and new capital debts incurred by settlers in each of the last eleven years are shown in the following table. Amounts shown for new capital debts represent mainly the balance owing for the purchase of land sold by the Water Conservation and Irrigation Commission and the cost of improvements effected and shallow bores sunk by the Commission. The debts written off include debts on forfeited or surrendered holdings.

TABLE 371.—Irrigation Agency—Advances to Settlers, 1935-36 to 1945-46.

Year ended 30th June.	Advances.	New Capital Debts Incurred.	Revenue Charges, including Interest & Water Charges.	Repayments.		Debts Written Off.	Balance of Indebted- ness at 30th June.
				Principal.	Revenue Charges.		
	£	£	£	£	£	£	£
1936 ... ..	26,305	229,846	207,032	95,487	200,956	26,387	1,648,545
1937 ... ..	57,989	134,210	216,865	94,182	213,186	9,610	1,740,631
1938 ... ..	98,472	94,883	247,617	144,001	225,406	7,104	1,805,092
1939 ... ..	107,293	91,593	232,291	147,497	221,647	9,039	1,858,086
1940 ... ..	97,047	67,832	247,913	121,736	199,319	31,428	1,918,395
1941 ... ..	83,464	53,076	280,342	142,413	235,231	55,183	1,902,450
1942 ... ..	71,728	52,931	322,669	119,161	266,804	56,085	1,907,728
1943 ... ..	61,017	38,992	286,784	154,351	345,550	53,026	1,741,594
1944 ... ..	49,312	51,756	296,311	139,676	313,896	33,758	1,651,643
1945 ... ..	29,945	78,545	330,477	128,833	303,736	18,114	1,639,927
1946 ... ..	33,006	86,643	257,551	115,023	313,233	13,822	1,575,049

New capital debts incurred in 1945-46 included £66,772 for sale of land, £6,964 for improvements and £12,529 for shallow bores; the total amounts in the years 1935-36 to 1945-46 were: sale of land, £644,606; improvements, £118,123, and shallow bores, £206,965.

*Closer Settlement Agency.*

This agency, established on 23rd December, 1936, is empowered to make advances to persons who receive finance from the Rural Bank Department to assist them to acquire for rural production part of an estate approved for subdivision for the purpose of promoting closer settlement.

Advances are made up to 13½ per cent. of the value of security to supplement advances up to 66½ per cent. made by the Rural Bank. In this way the settler may obtain an advance up to 80 per cent. of the valuation of his property. No new advances have been made since 1941-42.

TABLE 372.—Closer Settlement Agency—Advances to Settlers, 1937-38 to 1945-46.

Year ended 30th June.	Advances.	Revenue Charges, including Interest.	Repayments.		Balance of Indebtedness at 30th June.
			Principal.	Revenue Charges.	
	£	£	£	£	£
1938 ... ..	5,580	134	16	68	5,630
1939 ... ..	2,495	341	171	267	8,028
1940 ... ..	146,140	1,244	2,108	289	153,015
1941 ... ..	10,402	3,482	890	1,787	164,222
1942 ... ..	2,209	4,352	430	3,581	166,772
1943 ... ..	...	5,127	523	4,462	166,914
1944 ... ..	...	5,826	574	5,222	166,944
1945 ... ..	...	6,450	1,603	6,678	165,113
1946 ... ..	...	6,483	2,080	7,045	162,471

*Closer Settlement Fund—Advances.*

The Closer Settlement Fund relates to schemes for acquiring and subdividing large estates for closer settlement commenced in 1905, and to the settlement of returned soldiers, the accounts of both schemes having been incorporated in the fund in 1928. A description of the systems and summary of the operations are shown in the chapter "Land Legislation" page 597 *et seq.*

Closer settlement operations have been on a restricted scale for some years and the advances shown in Table 373 relate for the most part to the balance of purchase money payable on extended terms by new holders to whom were reallocated properties which had reverted to the Crown.

*Other Advances to Settlers.*

Advances for the purchase of wire netting and other materials for the construction of rabbit-proof fencing, etc. are made by the Department of Lands, as described in chapter "Pastoral Industry" at page 543.

Advances to assist landholders to clear their land of prickly-pear are made by the Department of Lands in terms of the Prickly-pear Act (see page 599). The maximum period for repayment of such advances is twenty years.

*Summary of Advances to Settlers.*

The following summary relates to advances made to settlers in New South Wales through the State instrumentalities described above (pages 415 to 421). The amounts include substantial sums made available by the Commonwealth Government for distribution by the State:—

TABLE 373.—Advances to Settlers by the State of New South Wales.

Lending Agency.	Advances during Year ended 30th June—			Balance of Debt Outstanding.	
	1944.	1945.	1946.	At 30th June, 1939.	At 30th June, 1946.
Closer Settlement Fund ... ..	£ 28,487	£ 66,438	£ 6,725	£ 13,522,971	£ 7,458,194
Purchase of Wire Netting ... ..	...	...	...	404,006	235,291
Prickly Pear Eradication ... ..	...	...	...	15,356	5,900
Rural Bank of New South Wales—					
Rural Bank Department—					
Overdrafts* ... ..	628,685	953,655	1,708,705	10,570,803	10,651,361
Long Term Loans ... ..	8,600	8,417	10,331	4,865,241	2,560,779
Total ... ..	637,285	962,072	1,717,036	15,436,044	13,212,140
Agency Department—					
Rural Reconstruction ... ..	484,404	756,142	868,160	2,254,368	4,237,098
Rural Industries ... ..	125,174	187,703	156,783	1,054,938	1,077,797
Advances to Settlers ... ..	14,309	19,631	32,001	830,150	429,880
Irrigation ... ..	101,068	108,490	119,649	1,858,086	1,575,049
Closer Settlement ... ..	...	...	...	8,028	162,471
Guarantee ... ..	10,804	40,893	32,425	10,701	13,822
Total ... ..	735,759	1,112,859	1,209,018	6,016,271	7,496,117
Grand Total ... ..	1,401,531	2,141,369	2,932,779	35,394,648	28,407,642

\* Amount of Overdraft represents limit authorised.

*Commonwealth Bank—Rural Credit and Mortgage Departments.*

In the Commonwealth Bank of Australia, separate departments have been established to provide credit facilities of a special nature for the benefit of rural industries. The Rural Credit Department, established in October, 1925 to assist in the marketing of rural products, may make seasonal advances, upon the security of primary produce, to banks, co-operative associations, etc.

The Mortgage Bank Department was opened on 27th September, 1943 to provide long-term loans to primary producers, against securities approved by the Bank, at fixed rates of interest, with repayment on an amortisation principle. Advances may be made up to 70 per cent. of the security, but not exceeding £5,000, for terms ranging up to forty-one years. The rate of interest for loans up to twenty years is 4 per cent. per annum, and for loans from twenty-one to forty-one years, 4½ per cent. The rate of amortisation may not be less than 1 per cent. per annum. Further particulars regarding these departments of the Bank are shown in chapter "Private Finance" of this Year Book.

*Liens on Livestock, Wool and Crops.*

Particulars of the number and amount of registered loans made on the security of livestock, wool, and growing crops are published in the chapter "Private Finance." These include advances made on such security by Government agencies as well as by private institutions and individuals.

## RATES OF INTEREST CHARGED ON RURAL LOANS.

Prior to 1929 rates of interest were high but they declined during the depression period and have remained at the lower levels. Details regarding interest rates and charges during a long period are shown in the chapter "Private Finance."

The trend of rates of interest on rural loans since the beginning of 1930 is indicated below. The table shows the rates current in January of each year on rural loans through the Rural Bank and various governmental agencies and from some private sources:—

TABLE 374.—Rates of Interest on Rural Loans, 1930 to 1947.

Lending Agency.	Month of January in Year—							
	1930.	1933.	1935.	1939.	1943.	1944.	1945 and 1946.	1947.
	Per cent.							
Rural Bank—								
Long Term Loans ... ..	6½	5	4½	} 4½	4½	4½	4½*	4½
Overdraft ... ..	6½	5	4½					
Governmental Agencies—								
Advances to Settlers ... ..	...	...	3	3	3	3	3	3
Rural Industries ... ..	6	5½	4	4	4	4	4	4
Irrigation—								
Bore Advances† ... ..	5½	5½	} 4	4	4	4	4	{ 3½
Other Advances ... ..	6½	6						
Rural Reconstruction†—								
Carry-on Advances ... ..	...	...	4	4	4	4	4	4
Debt Adjustment Advances...	...	...	...	2½	2½	2½	2½	2½
Commonwealth Mortgage Bank—								
Loans up to 20 years ... ..	...	...	...	...	...	4	4	4
Loans 21 to 41 years... ..	...	...	...	...	...	4½	4½	4½
Private Trading Banks—								
Overdrafts ... ..	6½ to 8	5 to 6	4½ to 5	4½ to 5½	4½ to 5	4½ to 5	4½ to 4½	4½ to 4½
Rural First Mortgages, excluding								
Mortgages to Banks and								
Government Agencies—								
Weighted Average Rate ... ..	...	...	4⅞	5	4½	4½	4½	4½

\* 4½ per cent. from 23rd January, 1946.  
Advances in 1947.

† Maximum rates.

‡ And Farm Water Supplies

The rates shown in the table for carry-on and debt adjustment advances, through the Rural Reconstruction Agency, are the maximum rates chargeable; the Board has power to fix lower rates or to waive interest under certain conditions. Certain advances of a special nature by governmental agencies bear lower rates of interest than those indicated above. For instance, drought relief advances, issued for the most part by the Rural Industries Agency in two years ended June, 1942, are free of interest for one year, then the rate is 1½ per cent.; and advances by the Rural Reconstruction Agency for the purchase of additional land in marginal wheat areas are charged interest at the rate of 1 per cent. Loans for agricultural purposes made under the Commonwealth Re-establishment and Employment Act, 1945, bear interest as follows: first £50, free of interest; over £50 to £250; 2 per cent.; over £250, 3½ per cent.

Information regarding the rate of interest payable on rural mortgages was first collected in October, 1933. The average rate on rural first mortgages at that date was 5½ per cent. It is probable that the predominant rate prior to 1930 was not less than 7 per cent.

## RURAL RECONSTRUCTION.

*Farmers' Relief and Rural Reconstruction Acts.*

The Farmers' Relief Act, which came into operation on 17th February, 1933, provided means whereby farmers in case of necessity could obtain special assistance to restore their financial position. It provided for the suspension of legal action in respect of the debts of farmers, and enabled them to secure assistance from Government funds to carry on their activities. Protection in respect of debts was given by a Stay Order upon application by the individual farmer and approval by the Farmers' Relief Board. The term of a stay order was originally three years, but it has been extended, by amending legislation, to November, 1946, or six years from the date of granting, whichever be the later. The latest date for receipt of applications for Stay Orders has been extended to 30th June, 1946, in order that farmers whose difficulties increased as a result of the war may obtain assistance.

The provisions of the Act were outlined and information regarding its administration was given in earlier editions of this Year Book. Assistance under its provisions is limited to cases when investigation indicates that the farmer has reasonable prospects of success after the benefits of the Act are extended to him, but the Board has been empowered by an amending Act to enforce a scheme of debt adjustment in any case in which this is warranted, and the farmer's creditors have failed to enter voluntarily into such a scheme.

In 1935 the Commonwealth Government provided funds for the assistance of farmers through State agencies in the adjustment of their private debts and the Farmers' Relief Act of New South Wales was amended to authorise the Farmer's Relief Board to administer the Commonwealth assistance to any farmer when investigation indicated that thereby his farming might be placed on a sound basis.

In terms of the Rural Reconstruction Act passed in New South Wales, which came into operation on 22nd November, 1939, the Farmers' Relief Board was replaced by the Rural Reconstruction Board.

The Rural Reconstruction Board consists of a director and six other members. Three members represent farmers engaged in (1) agriculture and mixed farming, (2) grazing, and (3) dairying and other types of farming; of these only the appropriate member may be present and vote at a meeting of the Board.

The Board is empowered to grant the benefits of debt adjustment without the issue of a Stay Order, and to issue a protection order should a creditor threaten adverse action while the affairs of an applicant for assistance are being investigated. It may make adjustments in debts to the Crown if deemed necessary for successful reconstruction of the farmer's affairs. Every case is treated on its merits, after an official survey of the material and financial aspects of each farmer's business, including income-earning possibilities under average conditions, both of seasons and markets, to determine (a) the degree of adjustment necessary and warranted, and (b) the commitments which could be met reasonably under average conditions after providing for maintenance of the farmer and his dependants and meeting the costs of working the farm.

Where it appears desirable that Crown capital value or rent be reviewed, the Board may extend the time within which application for reappraise-

ment may be made, and the Minister for Lands may order a fresh appraisal, although a reappraisal may have been made already under general provisions of the Crown Lands Acts. The Commissioners of the Rural Bank are empowered by the Act to write down a debt due to that Bank as part of a scheme of reconstruction.

Briefly, the position under the Farmers' Relief Act, as amended by the Rural Reconstruction Act, is that the Board may assist a farmer to rehabilitate and carry on his industry; may provide means to obtain essential capital items such as power, plant and income-producing stock; and may advance money at a low rate of interest to discharge private debts on a composition basis. The Board may adjust a farmer's debts and commitments to the Crown in a scheme of reconstruction adapted to and warranted by his circumstances, restrain individual creditors for a limited period by issue of a protection order, protect the farmer against action by creditors by the issue of a stay order and appoint Crown or Rural Bank officers to act as supervisors or agents without charge to the farmer.

Applications received from farmers for debt adjustment up to 30th June, 1946, numbered 4,473, and at this date 491 applications had been withdrawn and 1,710 rejected, and 347 were awaiting consideration. Of the 1925 applications which had been considered by the Board there were 342 in which the position of farmers under protection had improved sufficiently to enable them to carry on without debt composition and 1,583 for which schemes of debt adjustment had been approved by the Board. Creditors had signified assent and settlement had been effected or was in process in 1,456 of the cases approved, and 127 schemes of adjustment were in course of negotiation with creditors.

Particulars of the debt adjustment in respect of 1,456 cases finalised up to 30th June, 1946 are shown below:—

TABLE 375.—Farmers' Debt—Adjustment under Farmers' Relief Act, at 30th June, 1946.

Particulars.	Debts Owing to—			
	Governmental Bodies.	Other Creditors.		Total.
		Secured.	Unsecured.	
	£	£	£	£
Original debts ... ..	2,577,112	5,749,800	858,546	9,185,458
Debts written off ... ..	343,931	1,154,018	478,998	1,976,947
Debts as written down ... ..	2,233,181	4,595,782	379,548	7,208,511
By re-financing ... ..	+2,906,774	—2,560,118	—346,656	...
Debts after adjustment ... ..	5,139,955	2,035,664	32,892	7,208,511
Percentage of debts written off ...	13·4	20·0	55·8	21·5

The item "debts written off" relates to amounts involved in compositions through the Rural Reconstruction Board. Apart from these a substantial amount of debts owing by settlers has been written off.

*Reconstruction in Marginal Wheat Areas.*

The Commonwealth Wheat Industry Assistance Act, 1938 (described at page 727 of the Official Year Book, 1937-38) provided for moneys to be made available to the States for the purposes, *inter alia*, of vacating farmers from marginal wheat areas and enabling the lands to be devoted to other uses in accordance with plans approved by the Federal Minister on the advice of the State Minister.

A plan to operate in New South Wales was approved in 1940. Under this plan farmers in marginal wheat areas who voluntarily vacate their lands may be granted up to £300, together with removal expenses in each case. To farmers who are to remain, advances on long terms may be made to enable them to acquire enough vacated land to increase their farms to home maintenance standard for new uses and to purchase the stock, plant and other requisites needed in changing the nature of their farming activities.

The plan is administered by the Rural Reconstruction Board. The Board has declared approximately 4,000,000 acres, embracing about 2,000 farms in the counties of Nicholson, Sturt, Dowling, Cooper and Gipps (between the Murrumbidgee and Lachlan Rivers) as Marginal Wheat Areas.

Financial assistance approved under this scheme up to 30th June, 1946, amounted to £1,048,326, distributed as follows: £85,731 to 300 vacated farmers; £915,832 to 429 farmers for purchase of additional areas; and £46,763 to 92 farmers for improvements, purchase of stock, etc., in the reconstruction of farming activities.

Prior to the institution of the Commonwealth scheme, funds had been provided by the State under similar conditions for the vacation of farmers from marginal wheat areas. The total amount disbursed from these funds was £60,725 to 214 vacated farmers.

## GOVERNMENT GUARANTEES RELATING TO RURAL LOANS.

As a measure of assistance for the rural industries, the Government of New South Wales had undertaken to guarantee the repayment of advances made by banks and other lenders. The guarantees have been issued under the authority of two Acts, viz., the Advances to Settlers (Government Guarantee) Act, 1929-1934, and the Government Guarantees Act, 1934-1943.

By the Advances to Settlers (Government Guarantee) Act a Government Guarantee Board was constituted with power to guarantee the repayment of advances made by banks to settlers and co-operative societies formed mainly for the promotion of rural industry or the handling, treatment, manufacture, sale or disposal of rural products. The Board was authorised to give new guarantees only during the period of two years from 23rd December, 1929, and subsequently to supplement existing guarantees to the extent of one-fourth of the contingent liability already assumed. Guarantees were limited to £3,000 in respect of an individual settler and to £25,000 in respect of a co-operative society, and the aggregate amount of guarantees to be given in any one year was limited to £2,500,000. The Guarantee Board was dissolved and its functions were transferred to the Government Guarantee Agency of the Rural Bank as from 1st July, 1935.

Under the Government Guarantees Act the State Treasurer is empowered, with the approval of the Governor, to guarantee the repayment



of advances made by banks or other approved lenders to marketing boards and co-operative societies.

The amount of guarantees current at 30th June in the three years 1944 to 1946 is shown below, viz.: (a) the aggregate balance of debtors' accounts which are under guarantee in terms of the Advances to Settlers (Government Guarantee) Act and (b) the limit of guarantees (not the actual balance owing) in respect of marketing boards and co-operative (rural) societies under the Government Guarantees Act.

	1944.	1945.	1946.
Advances to Settlers (Government Guarantee) Act .....	£ 233,220	£ 191,435	£ 187,952
Government Guarantees Act .....	884,061	905,536	929,723

The amount guaranteed under the Government Guarantees Act included £196,900 in respect of three country co-operative meat companies and £150,000 in respect of the Metropolitan Meat Commission in each year.

# AGRICULTURE.

## DEVELOPMENT OF AGRICULTURE.

Until the end of the nineteenth century pastoral pursuits were predominant in New South Wales and agricultural production barely sufficed for local needs. Wheat-growing expanded rapidly after 1897, when the export trade in wheat commenced. The completion of the Burrinjuck Dam in 1913 and other works connected with the Murrumbidgee Irrigation Area coupled with closer settlement set new agricultural activities in train. Wheat became an export commodity second only to wool; the cultivation of rice was developed to produce more than enough for Australian requirements; viticulture and fruit-growing, and in the last few years the cultivation of oats, expanded. In the adjustment of agriculture to war-time needs wheat-growing was curtailed, the production of vegetables and rice was expanded and there was increased cultivation of fodder crops for dairy stock and of certain kinds of fruit. But wheat-growing remains by far the most extensive agricultural activity.

The extension of cultivation since 1891 is shown in the following table:—

TABLE 376.—Area under Cultivation, 1890-91 to 1940-41.

Year ended 31st March.	Area under—			Acres per Inhabitant under—	
	All Crops and Sown Grasses.	Crops. *	Sown Grasses.	All Crops and Sown Grasses.	Crops only.
	acres.	acres.	acres.		
<i>Average Area per Annum.</i>					
1891-95 ...	1,398,199	1,048,554	349,645	1.18	0.88
1896-00 ...	2,252,649	1,894,857	357,792	1.73	1.46
1901-05 ...	2,942,506	2,436,765	505,741	2.10	1.74
1906-10 ...	3,575,873	2,824,253	751,620	2.34	1.84
1911-15 ...	5,187,850	4,025,165	1,162,685	2.93	2.27
1916-20 ...	6,011,049	4,615,913	1,395,136	3.09	2.37
1921-25 ...	6,599,048	4,665,362	1,933,686	3.04	2.15
1926-30 ...	7,149,119	5,014,364	2,134,755	2.98	2.09
1931-35 ...	8,424,349	6,042,593	2,381,756	3.25	2.33
1936-40 ...	9,340,792	6,313,190	3,027,602	3.44	2.34
<i>Area in each Year.</i>					
1936 ...	8,452,774	5,730,315	2,722,459	3.18	2.16
1937 ...	8,820,129	5,951,043	2,869,086	3.29	2.20
1938 ...	9,509,661	6,464,624	3,045,037	3.50	2.38
1939 ...	10,243,664	7,044,038	3,199,626	3.73	2.57
1940 ...	9,677,735	6,375,931	3,301,804	3.50	2.31
1941 ...	9,784,852	6,365,435	3,419,417	3.52	2.29

\* Exclusive of double cropping.

Fluctuations in the area under crops are due mainly to variations in the extent of wheat-growing, which under normal conditions represents more than 75 per cent. of the total. The land under sown grasses (3,419,417 acres in 1940-41) is for the greater part in the coastal districts, and is used for dairy stock. The cultivation of grasses in inland areas, however, has increased rapidly in recent years in the Tablelands, the Western Slopes and the Riverina, where the practice was adopted to improve the carrying capacity of holdings used for pastoral purposes and mixed farming.

Information regarding cultivation as shown in Table 376 is not available on a comparable basis since 1940-41. The total area of crops (including all crops grown on land double cropped) in each of the last eleven seasons is shown below:—

TABLE 377.—Area of Crops, 1935-36 to 1945-46.  
(Including crops on land double-cropped.)

Year ended 31st March.	Area of Crops.	Year ended 31st March.	Area of Crops.	Year ended 31st March.	Area of Crops.
1936 ...	acres. 5,735,681	1940 ...	acres. 6,381,531	1944 ...	acres. 4,797,385
1937 ...	5,957,520	1941 ...	6,374,354	1945 ...	5,044,792
1938 ...	6,470,160	1942 ...	5,920,561	1946 ...	6,087,566
1939 ...	7,049,357	1943 ...	5,297,313		

Particulars obtained in 1941 indicate that the aggregate area, which, in the opinion of the occupiers, was suitable for cultivation after the removal of any standing timber was 31,822,433 acres, in a total area of 173,869,144 acres of alienated and Crown lands used for agricultural and pastoral purposes. Only a very small portion of the Western Division of the State is regarded as suitable for agriculture because the rainfall is inadequate.

The following table shows the distribution of agricultural and pastoral lands during the season 1940-41. The various divisions are shown on the map forming the frontispiece of this Year Book:—

TABLE 378.—Distribution of Agricultural and Pastoral Lands, 1940-41.

Division.	Alienated and Crown Lands.									
	Total area of division. *	Under occupation for Agricultural and Pastoral Purposes in Holdings of one acre and over.							Suitable for Cultivation.	
		Under crop.	Under sown grasses.	Virgin land cleared and prepared for ploughing.	Fallow land, etc.	Pre-viously cropped	Balance of area.	Total.	Area.	Proportion under crop.
	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	per cent.
Coastal—										
North Coast	6,965	133	1,674	5	6	26	2,888	4,732	608	21.9
Hunter and Manning.	8,396	127	448	7	5	25	4,166	4,778	492	25.8
Metropolitan	958	35	10	3	2	7	222	279	160	21.9
South Coast	5,950	64	190	12	4	20	1,990	2,280	469	13.7
Total ...	22,269	359	2,322	27	17	78	9,266	12,069	1,729	20.8
Tableland—										
Northern ...	8,088	130	32	14	12	29	6,391	6,608	581	22.4
Central ...	10,716	438	212	63	162	340	6,542	7,757	2,060	21.3
Southern ...	7,061	48	102	11	9	38	5,659	5,867	644	7.5
Total ...	25,865	616	346	88	183	407	18,592	20,232	3,285	18.7

\* Excluding Lord Howe Island and principal harbours.

TABLE 378.—Distribution of Agricultural and Pastoral Lands, 1940-41—  
*continued.*

Division.	Alienated and Crown Lands.									
	Total area of division. *	Under occupation for Agricultural and Pastoral Purposes in Holdings of one acre and over.							Suitable for Cultivation.	
		Under crop.	Under sown grasses.	Virgin land cleared and prepared for plough- ing.	Fallow land, etc.	Pre- viously cropped	Balance of area.	Total.	Area.	Propor- tion under crop.
Western Slopes—	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	per cent.
North	9,200	778	70	36	95	184	7,182	8,345	2,295	33·9
Central ...	7,723	1,199	120	81	491	773	4,305	6,969	4,669	25·7
South ...	11,239	1,291	350	100	650	1,311	6,319	10,021	5,466	23·6
Total ...	28,162	3,268	540	217	1,236	2,268	17,806	25,335	12,430	26·3
Central Plains—										
North	9,580	382	27	27	38	136	7,143	7,753	2,163	17·7
Central ...	14,811	340	9	38	144	307	13,100	13,938	3,667	9·3
Riverina ...	17,003	1,386	174	87	612	1,540	12,827	16,626	7,355	18·8
Total ...	41,394	2,108	210	152	794	1,983	33,070	38,317	13,185	16·0
Western ...	80,321	14	1	2	5	26	77,868	77,916	1,193	1·2
All Divisions	198,011	6,365	3,419	486	2,235	4,762	156,602	173,869	31,822	20·0

\* Excluding Lord Howe Island and principal harbours.

In addition to the area of land under crops in 1940-41 as shown above, 486,050 acres of new land were cleared and grubbed for ploughing, 2,234,760 acres were ploughed and worked during the year, and 4,761,437 acres of previously cropped land were not ploughed in this season. These particulars embrace both alienated and Crown lands, but the area of Crown lands under cultivation of any kind is relatively small.

## NUMBER OF AGRICULTURAL HOLDINGS.

The total number of holdings of one acre and upwards used for agricultural, dairying, or pastoral purposes in 1945-46 was 74,173 and areas of one acre or more in extent were cultivated on 49,743 holdings.

In this year only 10,447 holdings were used mainly for agricultural purposes, 17,051 holdings were used for agricultural and pastoral pursuits combined, 3,578 for agriculture with dairying, 1,028 for all three pursuits combined, and a limited amount of cultivation of a non-commercial character was conducted on other holdings. On 24,430 holdings there was no cultivation or less than one acre under crop.

The total number of rural holdings, the number on which at least one acre was cultivated and the total area of crops in the last eleven seasons are shown below; where land has been double-cropped in any year the area of each crop is included in the total:—

TABLE 379.—Cultivated Holdings and Area of Crops, 1935-36 to 1945-46.

Year ended 31st March.			Total Number of Rural Holdings.	Cultivated Holdings.	
				Number.	Area of Crops.
					acres.
1936	...	...	75,631	52,339	5,735,681
1937	...	...	76,239	53,612	5,957,520
1938	...	...	75,923	53,609	6,470,160
1939	...	...	75,365	54,126	7,049,357
1940	...	...	74,909	53,251	6,381,531
1941	...	...	74,495	52,290	6,374,354
1942	...	...	73,973	49,785	5,920,561
1943	...	...	73,579	50,224	5,297,313
1944	...	...	73,074	49,940	4,797,385
1945	...	...	74,566	49,172	5,044,792
1946	...	...	74,173	49,743	6,087,566

The number of holdings on which the various crops were grown in recent years is shown in the following statement; crops less than an acre in extent are not included:—

TABLE 380.—Cultivated Holdings and Principal Crops Grown.

Kind of Crop.			Number of Holdings upon which Crop was Grown.						
			1938-39.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Wheat	...	...	19,768	18,400	18,218	18,267	17,172	18,186	19,948
Maize...	...	...	17,215	17,829	15,950	15,924	15,247	14,435	14,098
Barley	...	...	1,620	1,573	1,407	2,538	2,017	2,614	2,320
Oats ...	...	...	23,434	20,471	21,561	25,833	4,656	23,488	24,367
Rice ...	...	...	313	329	331	348	364	330	329
Lucerne	...	...	9,504	8,897	8,362	10,166	9,885	9,049	8,995
Potatoes	...	...	3,147	3,251	3,214	4,777	4,853	4,887	4,971
Tobacco	...	...	41	49	52	57	39	26	20
Sugar-cane	...	...	861	816	*	*	687	597	558
Grapes	...	...	1,513	1,428	1,371	1,355	1,345	1,327	1,261
Orchards	...	...	8,197	7,562	7,230	6,096	6,492	6,053	6,177
Citrus	...	...	3,734	3,577	3,510	3,431	3,514	3,152	3,235
Other	...	...	5,865	5,347	5,073	3,734	4,099	3,839	4,100
Bananas	...	...	1,501	1,565	1,344	1,228	1,395	1,747	1,964

\* Not available.

Holdings on which oats was grown have been more numerous than the wheat farms in recent years though the area under wheat was at least three times the area under oats. But wheat was grown on many holdings under the "shares" system, described in the chapter "Rural Industries",

and the number of growers exceeded the number of holdings on which it was grown.

The orchards (of one acre or more) classified as citrus orchards were holdings with 50 or more citrus trees in the years 1937-38 to 1940-41 and those with at least an acre under citrus trees in 1942-43 and later. Other orchards have been classified on similar bases and some orchards have been included in both groups.

### CROPS—AREA AND PRODUCTION.

The area and production and average yield per acre of the various crops grown in each of the seasons 1944-45 and 1945-46 are shown in the following table:—

TABLE 381.—All Crops, Area and Production, 1944-45 and 1945-46.

Name of Crop.	1944-45.			1945-46.		
	Area.	Production.	Average Yield per acre.	Area.	Production.	Average Yield per acre.
	acres.	bushels.	bushels.	acres.	bushels.	bushels.
Grain—Wheat ... ..	2,844,804	17,133,870	6.0	3,773,901	62,520,000	16.6
Maize ... ..	94,107	2,437,317	25.9	92,416	2,560,695	27.7
Barley—Malting ... ..	17,567	79,161	4.5	18,624	339,264	18.2
Feed ... ..	10,552	42,555	4.0	10,269	156,672	15.3
Oats ... ..	544,364	1,756,674	3.2	617,070	9,996,765	16.2
Rye ... ..	530	5,463	10.3	456	5,121	11.2
Rice ... ..	24,596	1,692,747	68.8	28,372	2,735,040	96.4
Sorghum ... ..	8,393	126,372	15.1	6,248	100,182	16.0
		tons.	tons.		tons.	tons.
Hay—Wheaten ... ..	279,120	182,760	0.65	389,918	499,432	1.28
Barley ... ..	1,474	889	0.60	1,088	1,342	1.23
Oaten ... ..	237,834	87,836	0.37	289,720	352,976	1.22
Rye ... ..	581	495	0.85	243	246	1.01
Lucerne ... ..	66,820	99,173	1.48	69,745	126,016	1.81
		£			£	
Green Fodder (Fed-off) ...	647,187	1,092,160	...	541,810	1,234,000	...
		tons.	tons.		tons.	tons.
Vegetables for Human Consumption—Potatoes ...	34,796	80,587	2.32	22,865	61,768	2.70
Other ... ..	98,626	...	...	80,175	...	...
Vegetables for Animal Fodder ...	9,290	...	...	8,105	...	...
		bushels.	bushels.		bushels.	bushels.
Broom Millet—Grain ... ..	2,775	9,159	3.3	3,704	21,714	5.86
Fibre ... ..	...	9,578	3.45	...	22,845	6.17
Tobacco (Dried Leaf) ... ..	410	3,107	7.58	370	3,263	8.82
		tons.	tons.		tons.	tons.
Sugar Cane—Crushed ... ..	6,771	200,050	29.54	5,943	166,069	27.9
Not Cut ... ..	6,702	...	...	8,860	...	...
Used as Plants ... ..	270	...	...	263	...	...
Grapes—Productive—						
Drying Varieties ... ..	5,377	(b) 6,116	(a)	5,320	(b) 7,781	(a)
Table Varieties ... ..	2,906	4,363	(a)	2,735	4,817	(a)
Wine Varieties ... ..	6,847	15,778	(a)	6,876	18,473	(a)
		gallons.			gallons.	
Wine made ... ..	...	2,578,732	...	...	2,967,648	...
Young Vines for Wine ... ..	266	...	...	432	...	...
Other Grapes ... ..	495	...	...	620	...	...
		bushels.	bushels.		bushels.	bushels.
Orchards—Productive ... ..	54,912	4,834,385	88.0	54,958	5,717,783	104.0
Young Trees ... ..	11,048	...	...	10,814	...	...
		bushels.	bushels.		bushels.	bushels.
Bananas—Productive ... ..	11,967	1,600,422	133.7	13,145	1,960,381	149.1
Young Stools ... ..	3,283	...	...	3,793	...	...
Pineapples—Productive ... ..	183	13,264	72.5	134	9,408	70.2
Young Plants ... ..	46	...	...	68	...	...
		£	£ s.		£	£ s.
Nurseries ... ..	693	107,868	250 17	603	150,033	248 16
Other Crops ... ..	9,200	...	...	17,903	...	...
Total Area of Crops ... ..	5,044,792	...	...	6,087,566	...	...

(a) Area and production cannot be related because grapes are not always used for purpose for which originally grown.

(b) Dried weight.

Note.—Land under crops which failed is reckoned in the average.

*Value of Agricultural Production.*

The estimated value of the agricultural production of the State in 1938-39 and each of the last six seasons is shown in the following table, the values being based on prices realised on the farm or at nearest railway siding. The net value of agricultural production is shown in Table 385.

No deduction has been made from these values for cost of materials used in production of grain, and the fodder used for farm stock is included at its farm value.

TABLE 382.—Value of Agricultural Production, 1938-39 to 1945-46.

Crop.	Gross Value at Place of Production.						
	1938-39.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
	£	£	£	£	£	£	£
Wheat (grain)* ...	6,695,040	4,285,900	8,010,580	10,272,740	11,390,940	4,484,720	21,644,180
Maize (grain) ...	532,590	741,390	510,530	809,240	876,870	751,510	810,890
Barley (grain)* ...	27,200	37,820	66,340	45,740	87,320	44,330	145,990
Oats (grain) ...	498,180	224,480	428,970	764,400	763,800	547,770	1,325,010
Rice (grain) ...	444,430	391,690	425,220	640,990	826,820	349,790	566,600
Hay and Straw ...	4,252,420	2,340,570	3,427,260	5,075,720	3,686,670	2,608,650	5,375,480†
Green Food ...	1,156,970	1,270,810	1,309,350	1,480,000	1,670,000	1,092,160	1,234,000
Sugar-cane ...	482,520	507,260	514,910	490,890	458,990	350,550	292,640
Grapes ...	292,900	372,580	512,490	633,000	713,730	560,740	647,420
Wine, Brandy, etc....	80,420	145,200	143,600	137,990	182,550	159,750	160,180
Fruit—Citrus ...	823,300	619,080	1,157,120	1,464,610	2,023,610	1,832,920	1,671,510
Other ...	1,492,320	1,512,040	1,891,290	2,947,370	4,340,340	3,415,290	4,606,810
Potatoes ...	422,570	322,060	235,830	665,350	883,060	1,063,750	759,750
Other Vegetables } ...	1,263,090	1,508,050	{ 1,431,040	3,351,660	4,428,590	4,224,170	4,754,130
Other Crops ...							
Total ...	18,458,950	14,278,930	20,307,670	29,143,960	32,749,760	21,994,510	41,030,550

\* Including Government bounty, assistance from flour tax, etc. † Including grass cut for hay.

The values shown above represent estimated gross value, as at place of production, with no deductions for seed, fertilisers, etc., used in the process of production (see page 435).

*Value of Production per Acre.*

The following table shows the annual value of gross agricultural production and the average value per acre since 1887; because of variations in average value per acre attributable to fluctuations in the area of cereal crops the statement should be read in conjunction with Table 384.

TABLE 383.—Agricultural Production per Acre, 1886-87 to 1945-46.

Years ended 31st March.	Area Cultivated.	Value of Production (at Farm).	Average Value per Acre.
	acres.	£	£ s. d.
1887-91 ...	858,367	4,030,611	4 13 11
1892-96 ...	1,147,733	3,812,393	3 6 5
1897-1901 ...	2,114,250	5,592,620	2 12 11
1902-06 ...	2,515,268	6,302,903	2 10 1
1907-11 ...	2,933,021	8,565,164	2 18 5
1912-16 ...	4,507,748	12,867,474	2 17 1
1917-21 ...	4,349,814	16,986,250	3 17 8
1922-26 ...	4,680,110	22,328,630	4 15 5
1927-31 ...	5,467,982	16,842,398	3 1 7
1932-36 ...	5,826,754	15,656,024	2 13 9
1937-41 ...	6,440,214	19,567,460	3 0 9
1942-46 ...	5,428,223	29,753,850	5 9 7

TABLE 383.—Agricultural Production per Acre, 1886-87 to 1945-46 (*cont'd.*)

Years ended 31st March.	Area Cultivated.	Value of Production (at Farm).	Average Value per Acre.
	Acres.	£	£ s. d.
1936 ... ..	5,730,315	16,795,980	2 18 7
1937 ... ..	5,951,043	23,415,570	3 18 8
1938 ... ..	6,464,624	20,430,130	3 3 2
1939 ... ..	7,044,038	18,458,950	2 12 4
1940 ... ..	6,375,931	21,253,720	3 6 8
1941 ... ..	6,365,435	14,278,930	2 4 10
1942 ... ..	5,914,061	20,307,670	3 8 7
1943 ... ..	5,297,313	29,143,960	5 10 0
1944 ... ..	4,797,385	32,749,760	6 16 6
1945 ... ..	5,044,792	21,994,510	4 7 2
1946 ... ..	6,087,566	44,573,350	7 6 5

The comparatively high value of production per acre shown in the ten years prior to 1897 was due to the fact that agriculture was on a smaller scale, and crops produced by intense cultivation formed a larger proportion of the total than in later years. The higher values shown between 1917 and 1926 and since 1941-42 were due mainly to the higher level of prices received for produce. Expansion in the growing of vegetables also contributed in the last four years. A comparative statement of the average farm value per acre of various crops is shown in the next table.

TABLE 384.—Farm Values of Crops per Acre.

Crop.	Average Values per Acre.						
	1938-39.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Wheat, Grain	1 8 9	0 19 3	2 0 4	3 7 9	4 4 7	1 11 6	5 14 8
Maize, Grain ...	4 7 2	5 4 4	4 7 1	7 16 3	8 9 10	7 19 9	8 15 6
Oats, Grain ...	1 4 8	0 18 11	1 8 3	1 15 5	2 0 10	1 0 1	2 2 11
Rice ... ..	18 17 8	15 19 1	17 19 10	18 14 6	20 6 5	14 4 5	19 18 8
Hay * ... ..	3 19 6	3 5 3	4 15 10	6 17 8	6 17 9	4 9 0	7 2 0
Potatoes ... ..	25 1 1	18 1 2	13 6 8	27 3 5	29 7 5	30 11 5	33 4 7
Sugar-cane† ...	46 2 9	49 15 5	60 12 10	50 8 10	55 13 10	51 15 5	49 4 10
Vineyards† ...	23 15 11	32 17 4	41 15 4	50 3 1	58 8 0	47 12 5	54 1 9
Orchards† ... ..	20 14 5	27 10 5	41 5 2	59 13 11	82 1 5	62 13 2	76 9 4

\* Excluding grass cut for hay.

† Productive area only.

The average value of production per acre measures the effect from year to year of yield obtained and prices realised, *i.e.*, the combined effect of season and market on the average returns obtained by farmers from their holdings. To make the analysis complete such factors as the cost of production, the general level of prices, and acreage cropped per farm should be taken into consideration.



*Gross and Net Values of Agricultural Production.*

In the absence of actual records of farm sales and purchases there is considerable difficulty in valuing net agricultural production. But the estimated values in each of the seasons 1935-36 to 1945-46 are shown below:—

TABLE 385.—Agricultural Production—Gross and Net Values,  
1935-36 to 1945-46.

Year ended March.	Gross Production valued at Principal Markets.	Difference between Principal Market and Country Prices.	Gross Production valued at Place of Production.	Seed used and Fodder for Farm Stock used in Agricultural Work.	Net Production valued at Farm or nearest rail siding.	Value of Principal Materials used.	Net Value of Production after deducting Materials.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(Thousand £.)							
1936... ..	20,805	4,009	16,796	1,982	14,814	675	14,139
1937... ..	28,079	4,663	23,416	2,202	21,214	699	20,515
1938... ..	25,112	4,682	20,430	3,364	17,066	806	16,260
1939... ..	23,665	5,206	18,459	4,253	14,206	805	13,401
1940... ..	26,926	5,672	21,254	2,456	18,798	705	18,093
1941... ..	17,677	3,398	14,279	2,228	12,051	836	11,215
1942... ..	24,847	4,539	20,308	3,273	17,035	992	16,043
1943... ..	34,776	5,632	29,144	4,035	25,109	665	24,444
1944... ..	38,553	5,803	32,750	4,167	28,583	667	27,916
1945... ..	25,691	3,696	21,995	3,872	18,123	624	17,499
1946... ..	51,488	6,915	44,573	4,625	39,948	749	39,199

In estimating the net value of production as shown above, no account has been taken of depreciation of machinery and plant because of the difficulty in arriving at a reasonably reliable measurement of the amount of depreciation.

The second column provides a *relative* measure of the importance of agricultural production to the community by valuing all items on a common basis. It includes the value of transport, handling and marketing services rendered after the products leave the railway siding nearest the farm up to the point of sale in metropolitan markets. It has, however, the disadvantage of including values for such services on certain products which remain on the farms or are sold to neighbouring landholders.

The third column includes what may be called "cost of marketing" (freights, handling charges, commissions, etc.) that would have been paid if all products had been sold in the principal markets; the ratio to the total in the second column varies under the influence of changes in the volume and composition of agricultural production as well as changes in price levels, freights, commissions, etc.

The figures in the fourth column are those published in Table 382 and are inclusive of the estimated value of seed and fodder used in the course of production. The value placed on these is shown in the fifth column and the effect of deducting them is shown in the sixth column, which represents, as nearly as may be with existing data, the approximate money return to farmers for agricultural products, though it is inclusive of agricultural products used as stock feed in other rural industries, valued at £5,321,000 in 1942-43, £6,718,000 in 1943-44, £6,301,000 in 1944-45, and £6,796,000 in 1945-46.

The seventh column represents approximately the value of the principal non-rural materials used in agricultural production, and the eighth is the net value of agricultural production excluding the approximate value of the principal goods and services provided by non-rural industries. It represents approximately the aggregate incomes of farmers and their employees from agricultural production without deductions for interest, depreciation, etc., of farm properties, implements, machinery, etc.

### PRICES OF AGRICULTURAL PRODUCTS.

The following quotations represent the average prices obtained for farm products (local and imported) in the various Sydney markets. The average for the year represents the mean of the prices ruling during each month, and does not take into account the quantity sold during the month. The prices ruling in each month, *i.e.*, the mean of the daily quotations, are shown in the "Statistical Register".

TABLE 386.—Wholesale Prices of Agricultural Products, 1938 to 1946.  
(Sydney.)

Commodity.	1938.	1939.	1941.	1942.	1943.	1944.	1945.	1946.
	£ s. d. bush.	£ s. d. bush.	£ s. d. bush.	£ s. d. bush.	£ s. d. bush.	£ s. d. bush.	£ s. d. bush.	£ s. d. bush.
Wheat (f.a.q.)* ...	0 3 5½	0 2 6½	0 3 11½	0 3 11½	0 3 11½	0 3 11½	0 3 11½	0 3 11½
Flour (at Mill)† ...	9 5 4	12 6 1	12 8 0	12 8 0	12 8 0	12 8 0	12 8 0	12 8 6
Bran ...	6 5 0	4 10 0	6 0 0	6 0 0	6 0 0	6 0 0	6 0 0	6 0 8
Pollard ...	6 5 0	4 12 0	6 0 0	6 0 3	6 0 0	6 0 0	6 0 0	6 0 8
Oats ...	0 3 10	0 2 9	0 3 5½	0 3 2½	0 3 1	0 3 2½	0 3 4½	0 3 7
Maize ...	0 4 9½	0 4 4½	0 4 3½	0 6 3½	0 6 11	0 7 5½	0 7 3	0 7 3
Potatoes (local) ...	9 3 10	13 3 9	5 19 4	16 1 11	10 1 0	7 4 6	7 17 6	7 17 6
Hay—								
Oaten ...	9 16 2	7 14 1	8 7 11	9 5 0	10 12 9	7 14 4	9 0 0	11 5 8
Lucerne ...	6 12 11	5 11 3	5 15 6	8 9 6	8 0 7	9 4 2	12 3 6	11 5 8
Chaff—								
Wheaten ...	6 14 3	4 2 0	5 14 6	8 9 6	7 15 6	8 18 2	10 2 8	8 17 9

\* See comment below table.

† Includes Flour Tax, see page 464.

‡ Fixed wholesale price;

subsidy was paid to retailers to provide lower retail prices.

§ Few or no quotations.

In the above table the prices shown for wheat are shippers' and millers' buying prices for f.a.q. wheat up to October, 1939, and from then onward the price quoted is that fixed by the Australian Wheat Board for wheat for flour for local consumption, on bases as noted on page 459 of this Year Book to which reference should be made for details regarding wheat prices. As millers paid flour tax equal to about 11½d. per bushel the equivalent of approximately 4s. 11d. per bushel was paid for wheat consumed locally as flour in the years 1940 to 1946.

The combined price variations since 1911 of agricultural produce in Sydney markets, weighted according to the average consumption in New South Wales in the three years 1911-13, are shown below. The prices in 1911 have been adopted as base and called 1000. The index, being weighted on the basis of consumption in New South Wales, is to be viewed rather from the standpoint of prices paid by consumers than of prices paid to producers. Compilation of the index numbers has been suspended.

TABLE 387.—Wholesale Price Index Number—Agricultural Produce, 1911 to 1942.

Year.	Index Number.	Year.	Index Number.	Year.	Index Number.
1911	1000	1922	1638	1933	1122
1912	1339	1923	1720	1934	1114
1913	1069	1924	1475	1935	1279
1914	1135	1925	1680	1936	1299
1915	1648	1926	1892	1937	1487
1916	1163	1927	1767	1938	1523
1917	1127	1928	1456	1939	1351
1918	1377	1929	1707	1940	1371
1919	1990	1930	1428	1941	1334
1920	2430	1931	1061	1942	1875
1921	1750	1932	1137		

From 1921 to 1929 agricultural prices were high and relatively stable, apart from seasonal fluctuations. They fell rapidly (by 45 per cent.) between July, 1929 and March, 1931, and remained depressed until improving wheat prices brought an upward trend in the middle of 1935. The rise continued and the index number reached 1759 in July, 1938, though it fell again before the end of the year. There was no sustained increase in the years 1939 to 1941. Then potatoes and fodder became dear and the index number for the year 1942 was the highest since 1926.

#### AGRICULTURAL MACHINERY.

The following statement shows the area cropped, the total value of the agricultural machinery used, and the value of such machinery per acre of crop, in divisions of the State in the years 1929-30 and 1940-41. The value of machinery relates to such of the farm machines and implements as are used for agricultural purposes as distinct from pastoral and dairying activities. Similar information is not available for later years.

TABLE 388.—Agricultural Machinery, 1929-30 and 1940-41.

Division.	Area under Crop.		Value of Agricultural Machinery and Implements.		Aver. value of Machinery per acre of crop.	
	1929-30.	1940-41.	1929-30.	1940-41.	1929-30.	1940-41.
	Acres.	Acres.	£	£	£ s. d.	£ s. d.
Coastal ... ..	285,532	358,838	1,139,488	1,536,578	4 0 1	4 5 8
Tableland ... ..	443,714	615,793	1,165,960	1,544,381	2 12 7	2 10 2
Western Slopes ...	2,609,461	3,268,413	4,937,540	5,189,874	1 17 10	1 11 9
Central Plains and Riverina ... ..	2,144,606	2,107,646	3,653,248	3,320,281	1 14 1	1 11 6
Western ... ..	16,095	14,745	59,687	88,719	3 14 2	6 0 4
Total ... ..	5,499,408	6,365,435	10,955,923	11,679,833	1 19 10	1 16 8

In the coastal and tableland district the areas under cultivation are small, including many small holdings highly developed for fruit-growing, dairying and market gardening; on the tablelands, slopes and plains the implements in use serve large areas under wheat and oats. In the Western Division there is a small area under irrigation.

*Agricultural Machinery Pools.*

To promote rapid expansion of vegetable growing to meet war-time requirements the Commonwealth Government provided funds in November, 1943 for the establishment of pools of agricultural machinery. Machines and implements, with operators, were hired to producers on a non-profit basis at charges covering costs of operation and administration. Pools formed at Cowra, Guyra and Leeton in 1943 and at Bathurst and Batlow in 1944 operated machinery valued at approximately £130,000 under supervision of District War Agricultural Committees until hostilities ceased. The pool at Cowra was disbanded and local co-operative societies formed for the purpose have taken over the others.

The Government of New South Wales instituted a similar scheme in dairy districts in May, 1943 to encourage production of fodder and other crops, to offset the shortage of farm labour and to reduce costs of production. The scheme was extended to cover other rural activities in July, 1944. Advances are made through the Rural Industries Agency of the Rural Bank to rural co-operative societies (mostly butter factories) for the purchase of farm machinery and to provide the initial working capital for spare parts and stores and the employment of operatives. The Government provided £100,000 for these advances in 1942-43 and £50,000 in 1943-44. Particulars of the number of societies operating under the State scheme and of the amount of advances are as follow:—

	1944.	1945.	1946.
Societies registered and operating at 30th June .....	No. 45	63	64
Total amount advanced to 30th June .	£ 108,062	164,754	204,534

At 30th December, 1945, seventy-two societies were operating, but between January and June, 1946, certain butter and bacon factories which had participated as a war-time measure withdrew from the scheme.

*Power-driven Machinery and Tractors on Farms.*

Particulars of stationary engines used on farms in New South Wales were collected in 1930 and in each year since 1943 and particulars of tractors in 1930, 1937 and following years. The statistics reveal a substantial increase in mechanisation of farming activities.

At 31st March, 1943, there were 40,148 stationary engines in serviceable condition on farms, as compared with 24,367 in 1930. The number increased to 44,192 in 1945 and decreased to 42,962 in 1946. Those recorded in 1943 comprised 28,917 oil engines and 11,231 electric motors and engines of other types. The distribution of stationary engines in divisions was as follows:—

Date.	Coastal.	Tablelands.	Western Slopes.	Western Plains and Riverina.	Western Division.	Total N.S.W.
At 30th June, 1930 ... ..	7,890	3,633	7,210	4,625	1,009	24,367
At 31st March, 1943 ... ..	12,675	6,666	11,018	7,277	2,512	40,148
At 31st March, 1945 ... ..	14,324	7,493	11,754	7,937	2,684	44,192
At 31st March, 1946 ... ..	15,011	7,191	11,157	7,318	2,285	42,962

In June, 1930, the number of tractors on rural holdings was 6,242, viz., 6,041 wheeled and 201 crawler type; in March, 1946, there were 17,530 tractors; 16,112 wheeled and 1,418 crawler type.

The following statement shows the number of holdings on which tractors were used and the number of tractors in use in various divisions of the State; particulars regarding the number of holdings on which tractors were used in 1930 and 1943 are not available:—

TABLE 389.—Tractors in Use on Rural Holdings, 1930 to 1946.

Division.	1930.	1939.		1943.	1945.		1946.	
	Tractors.	Holdings.	Tractors.	Tractors.	Holdings.	Tractors.	Holdings.	Tractors.
Coastal ... ..	447	1,388	1,442	2,114	2,219	2,398	2,379	2,584
Tablelands ... ..	617	1,565	1,707	2,082	2,289	2,523	2,409	2,680
N.W. Slopes ... ..	731	1,664	1,836	1,923	1,854	2,050	1,925	2,108
C.W. Slopes ... ..	1,097	1,822	2,045	2,075	2,010	2,249	2,126	2,382
S.W. Slopes ... ..	1,109	1,875	2,040	2,128	2,149	2,351	2,402	2,641
N.C. Plain ... ..	212	555	628	650	651	743	692	793
C. Plain ... ..	304	431	465	518	483	541	524	586
Riverina ... ..	1,592	2,330	2,544	2,793	2,790	3,114	2,940	3,313
Western ... ..	133	192	219	299	360	390	355	383
Total, N.S.W....	6,242	11,822	12,926	14,582	14,805	16,359	15,752	17,530

The number of tractors per 100 holdings used mainly for agricultural and pastoral purposes was 8.5 in 1930, 17.8 in 1939, 21.4 in 1945, and 24.6 in 1946.

#### SHARE-FARMING IN AGRICULTURE.

A brief statement as to share-farming in New South Wales and the development of this system is given in the chapter "Rural Industries" on page 397.

#### FERTILISERS.

Superphosphate is the fertiliser most extensively used in New South Wales, the soils of the wheat areas, particularly in the south, being generally deficient in phosphoric acid.

Natural manures are used very little except in market gardens. The quantity used in 1941-42—the latest information available—was 119,030 loads applied to 17,860 acres of crops, including 104,621 loads for the treatment of 13,196 acres in the coastal division.

#### *Use of Artificial Fertilisers—Government Assistance.*

With the object of enabling primary producers (other than growers of wheat for grain) to continue the use of fertilisers, notwithstanding low prices for their products, the Commonwealth Government provided a subsidy on artificial fertilisers used in the years 1932-33 and 1934-35 to 1938-39 inclusive. The rate of subsidy was 15s. per ton in the earlier years and 10s. per ton in 1936-37 to 1938-39. The fertiliser under subsidy was used principally for top-dressing pastures and for crops of oats, fruit, vegetables and sugar cane. No bounty was paid in 1939-40 or 1940-41.

Because the cost had increased greatly, bounty was provided under the Superphosphate Bounty Act, 1941, as from 1st July, 1941, at the rate of 25s. per ton on superphosphate (22 per cent. phosphoric acid) sold by manufacturers, whose price to users was required to be reduced by the same amount.

In later seasons the selling price was stabilised at the same level as in 1941-42, but as the cost continued to rise, the Primary Producers' Assistance (Superphosphate) Act, 1943, provided for recoupment of each manufacturer by a subsidy, at rates varying according to production costs of each, for loss sustained in selling at the fixed price. The amount of bounty and subsidy paid in New South Wales was £98,391 in 1942-43 and subsidy was £163,813 in 1943-44, £303,506 in 1944-45, and £398,953 in 1945-46.

The control of manufacture, distribution and consumption of superphosphate is vested in the Superphosphate Industry Committee, appointed under National Security Regulations which were continued in operation until 31st December, 1947. Subsidy is paid on the recommendation of the Committee.

The Commonwealth Government also obtained supplies of nitrate of soda for sale at prices below cost to producers of certain crops.

In the distribution of artificial fertilisers for use in agriculture, priority is given to certain crops, as determined by the Federal Minister for Commerce and Agriculture. The quantity actually allotted to individual growers is determined by the State Departments of Agriculture.

#### *Artificial Fertilisers—Area of Crops Treated.*

The following table shows the area of crops treated with artificial fertilisers and the proportion of such area to total area of crops, also the quantity of superphosphate and other artificial manures used in various years since 1920-21:—

TABLE 390.—Crops Fertilised with Artificial Manures, 1920-21 to 1945-46.

Season.	Total Area of Crops.	Crops Treated.		Artificial Manures Used.	
		Area.	Proportion of Total Area of Crops.	Super-phosphate.	Other.
	acres.	acres.	per cent.	tons.	tons.
1920-21 ... ..	4,467,109	1,901,736	44.6	42,056	7,253
1925-26 ... ..	4,543,541	2,625,397	57.8	74,936	10,542
1929-30 ... ..	5,500,946	3,887,963	70.7	113,346	12,827
1930-31 ... ..	6,811,247	4,538,729	66.6	119,911	11,661
1931-32 ... ..	5,108,554	2,248,180	44.0	59,304	9,811
1935-36 ... ..	5,735,681	3,557,512	62.0	92,117	14,619
1936-37 ... ..	5,957,520	3,783,381	63.5	104,315	15,863
1937-38 ... ..	6,470,160	4,254,150	65.8	120,901	16,587
1938-39 ... ..	7,049,357	4,670,693	66.3	131,116	17,530
1939-40 ... ..	6,381,531	3,882,344	60.8	109,516	16,090
1940-41 ... ..	6,374,354	3,928,247	61.6	107,190	15,682
1941-42 ... ..	5,920,561	3,516,405	59.4	94,176	12,778
1942-43 ... ..	5,297,313	2,490,668	47.0	62,351	16,290
1943-44 ... ..	4,797,385	2,013,262	42.0	47,363	22,430
1944-45 ... ..	5,044,792	2,067,437	41.0	45,199	20,538
1945-46 ... ..	6,087,566	2,913,654	47.9	66,617	20,546

The decline in the use of fertiliser in the war years was due to scarcity of supplies and of farm labour and restriction of wheat growing.

*Artificial Fertilisers Used on Crops.*

The following table shows the area of crops treated with artificial fertilisers in divisions of the State and the quantity of such fertilisers used in the last two seasons; particulars regarding the use of fertilisers on pastures are not included (see page 399).

TABLE 391.—Artificial Fertilisers Used on Crops, 1944-45 and 1945-46.

Divisions.	1944-45.				1945-46.			
	Total Area of Crops.	Artificial Manures.			Total Area of Crops.	Artificial Manures.		
		Area of Crops Treated.	Quantity used.			Area of Crops Treated.	Quantity used.	
			Super-phosphate.	Other.			Super-phosphate.	Other.
	acres.	acres.	tons.	tons.	acres.	acres.	tons.	tons.
Coastal ... ..	365,788	118,851	7,181	14,671	359,759	115,107	7,266	14,314
Tablelands ...	559,000	179,083	6,396	1,120	649,865	244,530	8,215	978
Western Slopes ...	2,566,764	1,034,968	18,417	173	3,151,740	1,526,538	30,246	170
Central Plains ...	490,870	103,137	1,495	17	576,979	153,876	2,537	6
Riverina ... ..	1,049,128	619,644	11,418	3,848	1,329,151	866,195	18,037	4,448
Western ... ..	13,242	6,754	292	709	20,072	7,408	316	635
Total, N.S.W.	5,044,792	2,067,437	45,199	20,538	6,087,566	2,913,654	66,617	20,546

Separate details have been collected since 1943-44 regarding superphosphate and other artificial manures used on crops of wheat, vegetables and fruit. Particulars for the last two seasons are shown below:—

TABLE 392.—Artificial Fertilisers Used on Various Crops in Divisions, 1944-45 and 1945-46.

Particulars.	1944-45.				1945-46.			
	Wheat.	Vegetables.	Fruit.	Other.	Wheat.	Vegetables.	Fruit.	Other.
Coastal—								
Area Treated ... acres	2,718	26,079	18,004	72,050	3,384	20,630	17,833	73,260
Superphosphate ... tons	109	2,646	519	3,907	158	2,342	519	1,247
Other Art. Fert. ... "	18	7,942	5,681	1,030	18	7,236	5,911	1,149
Tablelands—								
Area Treated ... acres	97,232	33,421	3,649	44,781	150,816	28,645	4,949	60,120
Superphosphate ... tons	2,082	2,357	141	1,816	3,470	2,043	198	2,504
Other Art. Fert. ... "	20	613	399	88	12	372	497	98
Western Slopes—								
Area Treated ... acres	961,029	2,894	1,725	69,320	1,416,148	2,963	1,683	105,744
Superphosphate ... tons	16,332	210	89	1,786	27,182	208	75	2,780
Other Art. Fert. ... "	40	101	15	17	13	115	18	24
Central Plains—								
Area Treated ... acres	104,881	94	2	3,160	150,209	105	6	3,556
Superphosphate ... tons	1,418	15	...	62	2,441	17	...	79
Other Art. Fert. ... "	1	16	...	...	5	1	...	...
Riverina—								
Area Treated ... acres	539,768	4,658	14,336	60,882	777,170	3,603	16,929	68,493
Superphosphate ... tons	9,010	608	537	1,263	15,174	497	899	1,468
Other Art. Fert. ... "	22	576	2,643	607	44	462	3,074	863
Western Division—								
Area Treated ... acres	335	499	3,969	1,951	1,828	481	3,899	1,200
Superphosphate ... tons	19	57	162	54	26	43	209	38
Other Art. Fert. ... "	89	124	496	...	...	145	489	...
New South Wales—								
Area Treated ... acres	1,705,963	67,645	41,685	252,144	2,499,555	56,427	45,299	312,373
Superphosphate ... tons	28,970	5,893	1,448	8,888	48,451	5,150	1,900	11,116
Other Art. Fert. ... "	190	9,372	9,234	1,742	92	8,331	9,989	2,134

The average quantity of artificial fertiliser applied to crops of vegetables was  $4\frac{1}{2}$  cwt. per acre in 1944-45 and  $4\frac{3}{4}$  cwt. in 1945-46, including  $1\frac{3}{4}$  cwt. and  $1\frac{1}{8}$  cwt. of superphosphate respectively. In fruit growing the

approximate average in these seasons was 5½ cwt. to the acre, including nearly 1 cwt. of superphosphate.

In wheat growing superphosphate is the only fertiliser used; the average quantity per acre was 38½ lb. in 1944-45 and 43½ lb. in 1945-46, compared with about 56 lb. per acre before the war. Tests of manuring conducted on the farmers' experiment plots indicate that benefits derived from the application of superphosphate to wheat-lands are most marked in the southern portion of the wheat-belt, viz., the South-western Slopes and the Riverina. The beneficial results gradually diminish in the central portion of the wheat-belt and least advantage is gained in the heavier and phosphate bearing soils of the north-western districts. The results may be affected, however, by the fact that in the south fallowing is more common than elsewhere. The use of superphosphate on wheat crops in the Northern, Central and Southern sections of the wheat-growing divisions is illustrated below:—

TABLE 393.—Use of Superphosphate on Wheat Areas in Divisions, 1944-45 and 1945-46.

Tablelands, Slopes and Plains.	Area under Wheat.	Wheat Crops treated with Superphosphate.		Superphosphate Used.	
		Area.	Proportion to area under Wheat.	Total.	Average Per Acre Treated.
	acres.	acres.	per cent.	tons.	lb.
1944-45.					
Northern ... ..	670,802	7,612	1.1	150	44.2
Central... ..	1,083,501	589,236	54.4	9,610	36.5
Southern ... ..	1,402,161	1,106,062	78.9	19,082	38.6
1945-46.					
Northern ... ..	791,907	14,820	1.9	373	56.4
Central ... ..	1,437,756	862,148	60.0	15,890	41.3
Southern ... ..	1,959,188	1,617,375	82.6	32,004	44.3

Superphosphate was used as fertiliser on 55.7 per cent. of the total area under wheat in 1944-45 and on 59.3 per cent. in the following season. The proportion was only 2 per cent. in the northern wheat districts and it ranged to 83 per cent. in the south.

#### DATES OF PLANTING AND HARVESTING.

The usual periods of planting and harvesting the principal crops of the State in the main districts in which they are sown are as follows:—

Crop.	Most Usual Months of—	
	Planting.	Harvesting.
Wheat ... ..	April-June ... ..	November-January.
Maize ... ..	September-December ... ..	January-July.
Oats ... ..	March-May ... ..	October-December.
Barley ... ..	May ... ..	October-December.
Rice ... ..	October ... ..	April-May.
Potatoes—early ... ..	July-August ... ..	October-January.
„ late ... ..	November ... ..	February-August.
Sugar-cane... ..	September ... ..	July-November.
Tobacco ... ..	November-December ... ..	March-April.
Broom Millet ... ..	September-November ... ..	January-April.

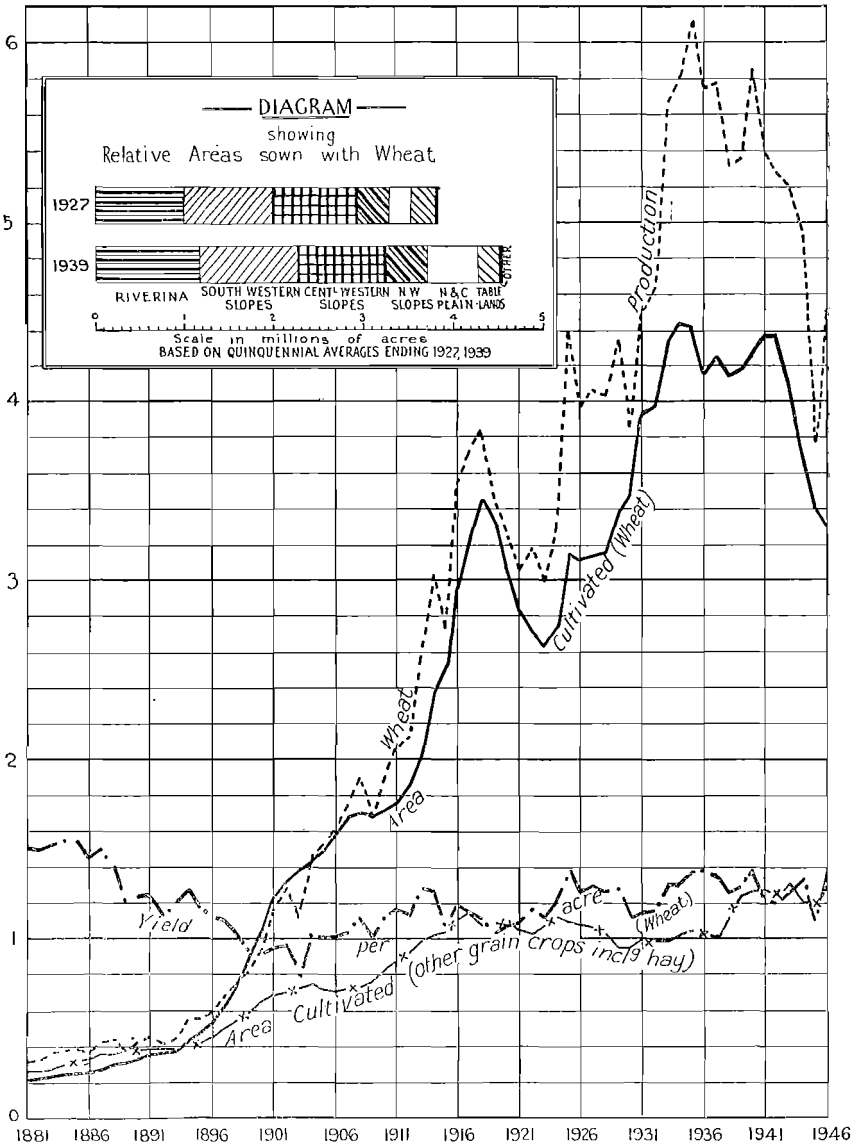


# INDIVIDUAL CROPS.

## WHEAT.

Wheat is the staple agricultural product of New South Wales. It is the principal product on a large proportion of the rural holdings of the State, and nearly three-quarters of the average area under crop is devoted to wheat.

### WHEAT GROWING IN NEW SOUTH WALES. Area, Production and Average Yield, 1876-77 to 1945-46.



The graph has been prepared on the basis of averages of the five seasons ended in each year as shown.

The numbers at side of graph represents millions of acres; tens of millions of bushels, and for yield of wheat per acre, tens of bushels.

The mild climate of New South Wales makes it possible to work the soil on scientific lines throughout the year, and paddocks are used for pastoral purposes after the crop has been harvested. The time of sowing varies according to district and seasonal conditions, but is seldom earlier than March or later than July. Harvesting generally begins in November and may extend until February.

### *The Wheat Belt.*

A description of the nature and extent of the wheat belt of New South Wales was published on pages 573 and 574 of the Year Book for 1928-29 and the approximate current limits of commercial wheat-growing are defined in the diagrammatic map on page 9 of this edition.

The extension of the limits of wheat-growing in New South Wales formed the subject of special reports by the Government Statistician in 1905, 1913, and 1923. Since the year 1923 there has been little change in the eastern and western limits of wheat growing in New South Wales, but pastoral activities such as sheep farming have replaced wheat farming on appreciable areas on the western fringe of the wheat belt between the Lachlan and Murrumbidgee Rivers.

### *Development of Wheat Growing.*

Wheat growing as an industry in New South Wales expanded steadily between 1890 and 1930. The area sown first exceeded 1,000,000 acres in 1897-98 and 2,000,000 acres in 1904-05 and was doubled during the next ten years. It is estimated that an area of between 20,000,000 acres and 25,000,000 acres in the principal wheat districts is suitable for cultivation, and the maximum area actually sown with wheat was 5,674,000 acres, of which 5,135,000 acres were harvested for grain in 1930-31.

Of the 49 harvests recorded in the following table, average yields have been as follow: 3 under five bushels per acre, 11 between five and ten bushels per acre, 26 between ten and fifteen bushels per acre, and 9 over fifteen bushels per acre. From 1928-29 to 1930-31 and in 1937-38 and later years areas with a fed-off value of less than 15s. per acre were classified as failed, and included with the areas sown for hay or grain. The value adopted was 7s. 6d. per acre in 1931-32 and 10s. per acre in the years 1932-33 to 1936-37.

The area under wheat for grain decreased from 4,650,872 acres in 1938-39 (next to 1930-31 and 1932-33 the largest ever sown) to 2,693,302 acres in 1943-44 (33 per cent. below the average for 1934-35 to 1938-39), due at first to lower prices, and later, to seasonal difficulties, scarcity of fertiliser and farm labour and to war-time control. Sowings increased a little in 1944-45, and in 1945-46 recovered to within 9 per cent. of the average of the pre-war quinquennium.

High yields per acre (17 bushels in 1942-43 and 17.6 bushels in 1943-44) partly offset the smaller areas sown, but drought so drastically affected the crop in 1944-45 that the harvest, 17,134,000 bushels, was the smallest for

twenty-four years. In 1945-46, when seasonal conditions were good in the northern and central sections and too dry over most of the southern districts for the greater part of the growing period, the average yields per acre were 18.9, 19.1 and 13.1 bushels in the respective sections, and for the whole State, 16.6 bushels. The harvest of 62,520,00 bushels was exceeded previously only in 1939-40, 1932-33, 1930-31 and 1915-16.

The following statement shows the area under wheat for grain and for hay, together with the total production, average yield per acre, and quantity exported since 1897-98, the first season in which there was a surplus of wheat for export:—

TABLE 394.—Wheat—Area, Production, and Exports, 1897-98 to 1945-46.

Season.	Area under Wheat.				Yield.		Average yield per acre.		Wheat and flour exported overseas during year following harvest.
	For Grain.	For Hay.	Fed-off.*	Total.	Grain.	Hay.	Grain.	Hay.	
	acres.	acres.	acres.	acres.	000 bushels.	000 tons.	bushels.	tons.	000 bushels.†
1897-98	993,350	213,720	†	1,207,070	10,560	182	10.6	.85	582
1898-99	1,319,503	312,451	†	1,631,954	9,276	177	7.0	.57	437
1899-00	1,426,166	414,813	†	1,840,979	13,604	341	9.5	.82	865
1900-01	1,530,609	332,143	†	1,862,752	16,174	348	10.6	1.05	4,788
1901-02	1,392,070	312,858	†	1,704,928	14,809	287	10.6	.92	2,914
1902-03	1,279,760	320,588	†	1,600,348	1,585	76	1.2	.24	154
1903-04	1,561,111	286,702	†	1,847,813	27,334	452	17.5	1.58	9,772
1904-05	1,775,955	284,367	†	2,060,322	16,464	207	9.3	.73	5,661
1905-06	1,039,447	313,582	†	2,253,029	20,737	305	10.7	.97	5,338
1906-07	1,866,253	316,945	16,744	2,199,942	21,818	403	11.7	1.27	6,246
1907-08	1,390,171	365,925	129,813	1,885,909	9,156	198	6.6	.54	962
1908-09	1,394,056	490,828	104,202	1,989,086	15,483	427	11.1	.87	4,866
1909-10	1,990,180	380,784	5,825	2,376,789	28,532	566	14.3	1.49	12,111
1910-11	2,128,826	422,972	61,458	2,613,256	27,914	468	13.1	1.11	14,423
1911-12	2,380,710	440,243	80,731	2,901,684	25,088	423	10.5	.96	10,172
1912-13	2,231,514	704,221	31,557	2,967,292	32,487	780	14.6	1.11	17,116
1913-14	3,205,397	534,226	23,393	3,763,016	38,020	588	11.9	1.10	20,038
1914-15	2,758,024	569,431	815,561	4,143,016	12,831	355	4.7	.62	785
1915-16	4,188,865	879,678	53,702	5,122,245	66,765	1,212	15.9	1.38	23,514
1916-17	3,800,604	633,605	58,101	4,498,310	36,598	814	9.6	1.28	21,262
1917-18	3,329,371	435,180	63,885	3,828,436	37,712	485	11.3	1.11	12,650
1918-19	2,409,669	613,544	204,161	3,227,374	18,325	517	7.6	.84	19,694
1919-20	1,474,174	716,770	877,596	3,068,540	4,388	355	3.0	.49	427
1920-21	3,127,377	520,555	15,420	3,663,352	55,025	822	17.8	1.58	41,746
1921-22	3,194,949	467,363	24,735	3,687,047	42,767	575	13.4	1.23	21,798
1922-23	2,942,857	598,184	350,968	3,892,009	28,668	649	9.7	1.09	8,904
1923-24	2,945,335	695,622	283,306	3,924,262	33,176	703	11.3	1.01	11,976
1924-25	3,550,078	388,479	21,647	3,960,204	59,767	537	16.8	1.38	38,741
1925-26	2,925,012	449,803	286,552	3,661,367	33,806	444	11.6	.99	16,951
1926-27	3,352,736	311,213	36,160	3,700,109	47,541	395	14.2	1.27	18,697
1927-28	3,029,950	369,960	622,385	4,022,295	27,042	343	8.9	.93	15,516
1928-29	4,090,083	375,270	19,605	4,484,958	49,257	390	12.0	.94	21,063
1929-30	3,974,064	381,071	48,914	4,404,049	34,407	311	8.7	.82	14,621
1930-31	5,134,960	520,993	17,992	5,673,945	65,877	678	12.8	1.30	44,122
1931-32	3,682,945	292,234	20,008	3,995,187	54,966	376	14.9	1.29	38,769
1932-33	4,803,943	290,556	24,535	5,119,034	78,870	396	16.4	1.36	40,779
1933-34	4,584,092	324,120	30,561	4,938,782	57,057	385	12.4	1.19	21,503
1934-35	3,892,768	271,272	26,017	4,190,057	48,678	342	12.5	1.26	30,471
1935-36	3,851,373	224,632	49,651	4,125,656	48,822	267	12.7	1.19	25,546
1936-37	3,982,864	293,854	28,417	4,305,135	55,668	352	14.0	1.20	28,540
1937-38	4,464,664	348,339	28,491	4,841,494	55,104	350	12.3	1.00	26,380
1938-39	4,650,872	559,437	35,993	5,246,302	59,898	612	12.9	1.09	28,955
1939-40	4,380,595	264,239	35,852	4,680,686	76,552	373	17.5	1.41	36,604
1940-41	4,453,963	354,833	57,181	4,865,977	23,933	271	5.4	0.76	12,586
1941-42	3,968,758	346,261	26,621	4,341,640	48,500	315	12.2	0.91	8,868
1942-43	3,032,946	287,470	66,061	3,386,477	51,693	373	17.0	1.30	6,903
1943-44	2,693,302	198,066	83,700	2,975,068	47,500	250	17.6	1.26	14,238
1944-45	2,844,804	279,120	50,334	3,174,258	17,134	183	6.0	0.65	3,395
1945-46	3,773,901	389,918	49,612	4,213,431	62,520	499	16.6	1.28	21,467

\* Includes area sown for green food. In 1927-28 and previous years all areas fed-off were included in this column. In 1928-29 and subsequent years areas with an estimated fed-off value of less than that indicated on page 444 were treated as having failed entirely, and the acreage was allocated to grain or hay according to the purpose for which sown.

† Information not available. ‡ Flour has been expressed at its equivalent in wheat.

*Wheat Districts.*

The statistical divisions of New South Wales are shown on the map as the frontispiece of the Year Book.

The principal wheat-producing divisions of the State are the Riverina, the south and central-western slopes; next in order is the north-western slopes division. Large areas are sown also on the central plains and northern tablelands. The relative areas sown with wheat in five-year periods ended in 1927 and 1939 in statistical divisions are illustrated by inset to the graph at page 443 of this Year Book. The average area harvested for grain and the average yield in divisions for the period of ten years 1935-36 to 1944-45 are shown in the following summary:—

TABLE 395.—Wheat Area and Production—Averages, Ten Years  
1935-36 to 1944-45.

District.	Northern.		Central.		Southern.		Total.	
	acres.	bus.	acres.	bus.	acres.	bus.	acres.	bus.
Coastal ...	...	...	...	...	...	...	3,481	47,490
Tableland ...	12,130	154,454	197,414	3,174,902	2,497	41,087	212,041	3,370,443
Slopes ...	478,512	6,681,830	850,112	10,933,055	879,380	11,851,061	2,208,004	29,465,946
Plains ...	251,561	2,990,439	257,918	1,681,494	893,356	10,902,395	1,402,835	15,574,323
Western Division ...	...	...	...	...	...	...	6,053	22,194
Total ...	742,203	9,826,723	1,305,444	15,789,451	1,775,233	22,794,543	3,832,414	48,480,401

Although the proportions vary seasonally, approximately 47 per cent. of the area harvested for grain was in the southern districts, 34 per cent. in the central districts, and 19 per cent. in the northern districts. Thus the wheat belt is divided into three portions. The northern normally receives the greater part of its rainfall in the summer, and the southern in the winter; the rainfall of the central districts is non-seasonal in character. Differences of soil, geographical features, cultural methods, and other factors play a considerable part in determining the yields of the various divisions.

The following statement shows the average yield per acre in divisions in recent seasons:—

TABLE 396.—Wheat Areas and Yields, 1935-36 to 1945-46.

Divisions.	Area Harvested for Grain.		Yield of Grain.		Yield of Grain per Acre.							
	Average 1935-36 to 1944-45.	1945-46.	Average 1935-36 to 1944-45.	1945-46.	Average 1935-36 to 1944-45.	1939 -40.	1940 -41.	1941 -42.	1942 -43.	1943 -44.	1944 -45.	1945 -46.
Coastal ...	acres. 3,481	acres. 4,901	000. bus. 47	000. bus. 88	bus. 13·6	bus. 10·1	bus. 6·0	bus. 11·5	bus. 18·2	bus. 18·6	bus. 15·0	bus. 17·9
†Northern ...	742,203	716,731	9,827	13,561	13·2	13·9	3·7	14·6	14·7	15·4	15·0	18·9
†Central ...	1,305,444	1,308,764	15,789	26,061	12·1	19·6	6·6	12·0	17·4	16·5	5·0	19·9
†Southern ...	1,775,233	1,736,890	22,795	22,797	12·8	17·5	5·3	11·3	18·1	19·6	2·5	13·1
Western ...	6,053	6,615	22	13	3·7	9·2	0·3	...	8·1	1·6	...	2·0
Total ...	3,832,414	3,773,901	48,480	62,520	12·7	17·5	5·4	12·2	17·0	17·6	6·0	16·6

† Tablelands, Slopes, and Central Plains.

Generally speaking, the use of fertilisers and the practice of fallowing are most extensive in the southern districts, where the average yield is usually higher than the general average for all districts. This is due in a large part to the more dependable nature of the winter rains. In 1944-45, however, severe drought prevailed in these districts when crops were sown, and in the following season late autumn and spring rains failed.

*Rainfall Index in Wheat Districts.*

The following summary provides a monthly index of rainfall in the wheat districts of the State since 1933. The index is derived from the ratios of the average rainfall of eleven districts to the normal rainfall in the same districts weighted in accordance with the average area sown with wheat in each district. The normal rainfall for each month (based on records of a period of years) is represented by 100, and the index shows, therefore, the percentage of actual to normal rainfall in each month:—

TABLE 397.—Rainfall Index in Wheat Districts, 1933 to 1946.

Month.		Rainfall Index—New South Wales Wheat Districts. (Percentage of Normal).													
		1933.	1934.	1935.	1936.	1937.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.
January	...	143	169	117	184	154	74	38	24	336	31	138	28	127	158
February	...	7	310	104	207	37	81	221	18	87	158	55	32	92	269
March	...	53	35	24	131	105	9	287	21	148	70	17	49	30	95
April	...	86	117	199	67	41	75	280	227	11	37	148	80	63	57
May	...	74	4	28	48	56	68	48	36	61	237	118	135	90	43
June	...	65	72	33	107	63	83	115	17	87	128	53	14	167	50
July	...	127	163	115	203	31	94	60	33	67	113	83	53	73	84
August	...	50	137	68	96	113	141	216	36	41	105	103	90	152	41
September	...	152	71	114	53	83	30	48	116	47	78	122	26	27	39
October	...	102	255	116	52	109	139	140	11	75	97	83	73	104	47
November	...	190	218	27	15	73	54	201	52	65	164	171	45	67	155
December	...	176	66	68	215	73	9	26	129	38	93	32	42	47	94
Average yield of wheat per acre, season ended March of following year.															
Bushels...	...	12·4	12·5	12·7	14·0	12·3	12·9	17·5	5·4	12·2	17·0	17·6	6·0	16·6	3·5

The significant months as regards the effect of rainfall on wheat yields are from April to October—especially April, May, and September. The wheat districts extend over practically the whole length of the hinterland, and seasonal conditions vary widely as between districts. The incidence of fallowing and fertilising, temperatures and winds also play a large part in modifying the effect of rainfall on yield.

In the following table the rainfall index for the northern, central, and southern sections of the wheat belt is shown in comparison with the average yield per acre in the seasons 1945-46 and 1946-47.

TABLE 398.—Rainfall Index and Average Yield in Various Wheat Districts, 1945 and 1946.

Month.	Rainfall Index 1945—Wheat Districts. Normal for each month = 100.				Rainfall Index 1946—Wheat Districts. Normal for each month = 100.			
	North- ern.	Central.	South- ern.	Total.	North- ern.	Central.	South- ern.	Total.
January ... ..	109	159	116	127	130	110	184	158
February ... ..	155	110	71	92	49	153	363	269
March ... ..	31	41	26	30	48	76	113	95
April ... ..	101	103	38	63	60	78	48	57
May ... ..	160	139	55	90	37	35	49	43
June ... ..	177	219	143	167	33	38	59	50
July ... ..	83	58	77	73	20	42	114	84
August ... ..	156	139	157	152	1	14	60	41
September ... ..	23	18	32	27	160	47	10	39
October ... ..	53	72	128	104	24	61	46	47
November ... ..	76	60	69	67	71	100	196	155
December ... ..	42	48	48	47	72	88	102	94
1945-46.				1946-47.				
Average yield of wheat per acre ...	18.9	19.9	13.1	16.6	1.5	1.7	5.5	3.5

#### *Average Yield of Wheat.*

Viewed over a long period of years, the average yield of wheat in New South Wales has been subject to marked fluctuations by reasons of the widely divergent nature of the seasons, but reference to Table 394 will show that these fluctuations have been much less marked since 1920-21 than formerly. The highest yields have usually been recorded in seasons following the worst droughts, and, besides giving proof of the advantages of fallowing, have gone far to make immediate compensation for the losses sustained. In the sixteen seasons ended 1945-46, the average annual yield fell below 12 bushels per acre in only two seasons, viz., in 1940-41 when winter rains failed and the average was 5.4 bushels and in 1944-45 when the southern wheat areas experienced drought of unusual severity and the average yield was 6 bushels. The highest averages in the sixteen years were 17.6 bushels per acre in 1943-44, 17.5 bushels in 1939-40 and 17 bushels in 1942-43.

The average annual yield in decennial periods since 1882 is shown below. The comparatively high average in the early years is due probably to the fact that the smaller area under cultivation in these early years embraced a larger proportion of land specially suitable for wheat-growing.

TABLE 399.—Wheat Yields, Decennial Averages, 1881-82 to 1940-41.

Period.	Average Yield per acre.	Period.	Average Yield per acre.
	bushels.		bushels.
1882-1891	13.30	1912-1921	11.62
1892-1901	10.02	1922-1931	12.02
1902-1911	11.04	1932-1941	13.10

In calculating these averages the area which was sown for grain, but failed, is included, while the area fed off profitably or used for green fodder is excluded.

Although the yield is influenced largely by the nature of the seasons, it is apparent that, as scientific methods of cultivation are being more widely adopted and land is properly fallowed, tilled and manured, and types of wheat are improved by plant breeding, the average is increasing. The average yield in the five seasons ended 1945-46 was 13.9 bushels per acre.

*Fallowing and the Wheat Yield.*

Between 1923-24 and 1941-42 statistics were collected of the yield of grain from the areas of new land, fallowed land, and unfallowed land sown with wheat. It was intended that land should not be classed as fallow unless it had been cultivated by ploughing during the year preceding the sowing, but it is doubtful whether farmers' returns were made on this basis in all cases. Summer fallow is practised to some extent.

The following table provides a comparison of the yields obtained from the various classes of land in 1941-42 in each of the divisions described on page 446:—

TABLE 400.—Wheat Yield from Fallowed and Unfallowed Land, 1941-42.

Division.	Area.‡			Total Yield.			Average Yield per Acre.		
	New Land.	Fallowed Land.	Stubble Land.	New Land.	Fallowed Land.	Stubble Land.	New Land.	Fallowed Land.	Stubble Land.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bushels.	bushels.
Coastal ...	89	1,892	1,862	589	35,990	7,615	6.6	19.0	4.1
Northern* ...	14,123	114,191	738,755	170,742	1,930,260	10,540,078	12.1	16.9	14.2
Central* ...	17,869	492,679	824,144	236,766	6,626,777	9,157,420	13.2	13.4	11.1
Southern* ...	13,762	899,122	846,211	177,753	10,463,486	9,149,021	12.9	11.6	10.8
Western ...	370	1,863	1,826	46	2,205	1,282	0.1	1.2	0.7
Total ...	46,213	1,509,747	2,412,798	585,896	19,058,688	28,855,416	12.7	12.6	12.0

\* Tablelands, Slopes, and Central Plains.

‡ Including areas which failed.

The average yields on fallowed land were far in excess of those from other land throughout the wheat belt. The climatic conditions prevailing in the various wheat districts and the methods adopted by farmers differ in a marked degree, consequently the results shown above do not represent fully the benefits which accrue from fallowing. Still, it is apparent that even with the present extent of fallow the improvement in the wheat yield has been appreciable.

The average yields per acre from fallowed and unfallowed lands respectively in the northern, central, and southern districts of the State in each year for which records have been obtained were as follow:—

TABLE 401.—Wheat Yields on Fallowed and Stubble Land, 1923-24 to 1941-42.

Year.	Northern Districts.*		Central Districts.*		Southern Districts.*		Whole State.	
	Fallowed.	Stubble.	Fallowed.	Stubble.	Fallowed.	Stubble.	Fallowed.	Stubble.
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1923-24 ...	8.3	6.8	10.4	8.5	15.3	12.2	14.1	9.6
1924-25 ...	19.4	16.1	19.1	14.7	19.9	13.9	19.7	14.8
1925-26 ...	9.3	7.5	15.3	10.7	13.2	10.1	13.5	10.0
1926-27 ...	16.1	14.3	16.4	12.7	15.2	12.3	16.0	13.0
1927-28 ...	5.8	3.6	9.0	5.7	11.7	7.5	11.2	5.9
1928-29 ...	16.7	14.3	14.5	9.7	13.7	9.2	13.9	10.6
1929-30 ...	19.2	15.0	7.9	4.2	11.7	6.5	10.8	7.3
1930-31 ...	16.3	14.7	15.8	12.8	15.2	9.9	15.4	11.8
1931-32 ...	20.1	16.4	18.6	13.5	16.7	11.6	17.1	13.4
1932-33 ...	16.6	12.8	19.3	13.7	20.6	15.1	20.2	14.1
1933-34 ...	21.4	17.0	14.0	10.3	14.0	7.8	14.3	10.7
1934-35 ...	18.0	13.3	13.1	10.2	13.8	9.3	13.8	10.7
1935-36 ...	13.2	9.3	13.1	7.2	17.0	9.9	15.8	8.5
1936-37 ...	16.8	12.8	15.0	11.4	16.0	11.8	15.8	11.9
1937-38 ...	14.8	11.4	14.2	8.6	15.3	9.4	15.0	9.6
1938-39 ...	23.1	20.6	13.0	9.5	12.3	8.3	13.0	12.6
1939-40 ...	16.1	13.9	21.9	17.8	18.3	14.8	19.3	15.6
1940-41 ...	5.2	4.0	7.7	6.4	6.1	4.4	6.5	5.0
1941-42 ...	16.9	14.2	13.4	11.1	11.6	10.8	12.6	12.0

\* Includes Tablelands, Slopes, and Central Plains.

The following statement shows the approximate areas of new land, fallowed land, and stubble land sown with wheat harvested for grain, including that sown for grain which failed entirely, in New South Wales during each of the ten seasons ended 1941-42.

TABLE 402.—Areas of Wheat Sown for Grain on Fallowed and Unfallowed Land, 1932-33 to 1941-42.

Season.	New Land.	Fallowed Land.	Remainder, Stubble Land.	Area Sown.	
				Total.*	Proportion of Fallowed Land.
	acres.	acres.	acres.	acres.	per cent.
1932-33 ...	175,232	1,852,243	2,776,468	4,803,943	38.6
1933-34 ...	180,088	2,152,276	2,251,728	4,584,092	46.9
1934-35 ...	133,018	2,242,764	1,516,986	3,892,768	57.6
1935-36 ...	127,249	2,199,006	1,525,118	3,851,373	57.1
1936-37 ...	180,729	2,144,932	1,657,203	3,982,864	53.9
1937-38 ...	263,409	2,241,214	1,960,041	4,464,664	50.2
1938-39 ...	281,892	2,179,740	2,189,240	4,650,872	46.9
1939-40 ...	199,258	2,201,024	1,980,313	4,380,595	50.2
1940-41 ...	103,643	2,019,754	2,165,380	4,288,777	47.0
1941-42 <sup>a</sup> ...	46,213	1,509,747	2,412,798	3,968,758	38.0

\* Approximate.



*Varieties of Wheat Grown.*

Progress in plant-breeding has been continuous since the time of Farrer (1886-1905), though retarded during the war periods. New varieties of wheat have been introduced and subsequently replaced by types more serviceable from the standpoint of climate and soil, disease resistance, quality and productivity. In this work the Department of Agriculture has co-operated with wheat-growers in cultivating experimental plots on farms throughout the State.

Attention has been given to the improvement of milling and baking quality to replace weak, soft flour wheats of low gluten content, especially in the north-western slopes division, where the wheats of greater flour strength are produced. The number of varieties recommended for cultivation has been reduced, and this has resulted in greater uniformity in the f.a.q. sample, with consequent advantages in marketing. In 1940-41 and 1945-46, about 68 per cent. of the area sown was of the five leading varieties as compared with 56 per cent. in 1929-30.

Particulars of the principal varieties grown in New South Wales in 1938-39, 1940-41 and 1945-46 are shown below. The figures have been compiled from preliminary returns and consequently the total acreage shown for each year is somewhat less than the area under wheat as shown in Table 394.

TABLE 403.—Varieties of Wheat Grown.

Variety.	1938-39.	1940-41.	1945-46.	Variety.	1938-39.	1940-45.	1945-46.
	acres.	acres.	acres.		acres.	acres.	acres
Bencubbin ...	746,093	1,346,105	1,543,504	Ghurka ...	67,284	76,438	50,738
Ford ...	994,100	858,989	437,916	Pusa No. 4 ...	133,358	90,354	44,570
Eureka ...	*	48,781	283,850	Pusa No. 111 ...	17,557	16,469	17,504
Eureka No. 2 ...	*	*	111,089	Baldwin ...	16,637	*	19,014
Dundee ...	816,233	428,184	215,935	Geeralying ...	101,480	74,483	18,809
Bordan ...	12,098	*	134,938	Bungulla ...	*	*	18,809
Gular ...	95,269	198,476	115,166	Charter ...	*	*	16,554
Ranee ...	206,020	177,972	112,777	Cailloux ...	370	*	16,329
Waratah ...	286,089	215,655	105,123	Baringa ...	266,499	111,267	15,296
Bobin ...	146,285	114,698	77,403	Other, Unspecified etc. ...	465,581	537,643	199,537
Nabawa ...	747,749	344,486	75,461				
Rapier ...	*	*	63,154	Total ...	5,120,600	4,678,600	3,809,467
Koala ...	*	*	59,892				
Fedweb No. 1 ...	1,898	38,650	55,402				

\* Information not compiled.

In 1946 and 1947 the Department of Agriculture recommended twenty-three principal varieties for sowing in specified zones of the New South Wales wheat belt; twenty varieties for grain, and three for hay or green fodder only. The order of sowing relates to the normal range of sowing dates for each district. Varieties so classified have been proved under

field conditions, to resist stem rust of the races known to be present in the State. Resistance to leaf rust is rare amongst the commercial varieties. The varieties recommended and their characteristics are shown below:—

TABLE 404.—Varieties of Wheat Recommended for New South Wales, 1946 and 1947.

Variety.	Districts for which Recommended.	Characteristics.					
		Yield.	Flour Content.	Straw.	Disease Resistance.		Other and General.
					Flag Smut.	Stem Rust.	

*For Hay or Green Fodder only.*

Baroota Wonder...	C.W. Slopes, Plains, N.E. Riverina.	C.W. Riv.	Heavy	...	Tall, tender.	M.R.	S.	High quality.
Florence ...	Coastal ...	...	Medium	...	do ...	S.	M.R.	Early maturing.
Zealand ...	N.E. Riverina ...	...	High ...	...	do ...	M.R.	S.	Late maturing.

*For Grain—Early Sowing.*

Bordan ...	General — Late Dis-	tricts.	Heavy	Medium -strong.	Tall ...	M.R.	M.R.	M.R. Septoria.
Celebration ...	N.-Western ...	...	High ...	do ...	Tall ...	R.	R.	Free stripping.
Fedweb 1 ...	N.-Western ...	...	Good ...	do ...	Short, strong.	S.	R.	Takes leaf rust.
Ford ...	General ...	...	Heavy	do ...	Tall ...	M.R.	M.R.	M.R. Septoria.
Ghurka ...	W. Riverina ...	...	Good ...	Weak...	Short, strong.	R.	M.R.	Grain only.

*For Grain—Mid-season sowing.*

Bencubbin ...	General, except Nor-	thern.	Heavy	Weak...	Weak...	R.	S.	Withstands dry
Dundee ...	do do ...	...	High ...	Medium -strong.	Strong	M.R.	V.S.	ness, Damaged by
Eureka } Eureka 2 }	C.W. Slopes (N.E. part).	(N.E. part).	do ...	do ...	Strong, f. tall.	S.	S.	frost. Frost liable.
Kendee ...	N.-Western ...	...	Heavy	do ...	Medium tall	R.	R.	Large, deeply
Koala ...	Pts. C.W. Slopes and C.W. Plains.	...	do ...	Weak...	Strong, short.	M.R.	S.	creased grain. Nice grain.
Ranee ...	S. Central and W. Riverina.	...	do ...	do ...	Short, fine, strong.	S.	S.	Disease liable.
Waratah ...	C. T'lands, Pt. C.W. Slopes, M.I.A.	...	do ...	do ...	Tall, slender.	S.	S.	Tends to shed
Yalta ...	N.-Western ...	...	do ...	Strong	Fairly strong.	R.	R.	grain. Small grain of premium quality.

*For Grain—Late Sowing.*

Bungulla ...	N.W. Plains, C.W. Slopes, Plains.	Pts. and	Heavy	Weak...	Weak...	R.	S.	Withstands dry-
Charter ...	N.-Western ...	...	High ...	Medium -strong.	Tall, slender.	R.	R.	ness. Premium wheat
Gabo ...	N.-Western ...	...	do ...	do ...	Short	S.	R.	in N.W. For heavy soils.
Gular ...	General ...	...	do ...	do ...	Slender	S.	S.	Premium wheat.
Pusa 4 } Pusa 111 }	N.-Western ...	...	Medium	Strong	do ...	R.	S.	High quality.

R., Resistant; M.R., Moderately resistant; S., Susceptible; V.S., Very susceptible.

*Size of Wheat Areas.*

The following table illustrates the recent development of wheat-growing in respect of number and average size of areas sown per holding:—

TABLE 405.—Number and Average Area of Wheat Farms.

Year.	Wheat sown for Grain, Hay, and Green Food.			Holdings on which wheat was sown only for hay or for green food. ‡	Wheat for Grain.		
	Holdings.	Total Area sown with Wheat.	Average Area per Holding devoted to Wheat.		Holdings.	Areas harvested for grain.	Average area per holding.
	No.	acres.	acres.	No.	No.	acres.	acres.
1920-21 ...	17,790	3,663,352	206	2,132	15,658	3,127,377	200
1925-26 ...	17,074	3,661,367	214	2,797	14,277	2,925,012	205
1930-31 ...	18,171	5,673,945	312	1,247	16,924	5,134,960	303
1935-36 ...	17,220	4,125,656	240	1,297	15,923	3,851,373	242
1938-39 ...	19,768	5,246,302	265	2,118	17,650	4,650,872	264
1939-40 ...	19,023	4,680,686	246	1,911	17,112	4,380,595	256
1940-41 ...	18,400	4,865,977	264	1,780	16,620	4,453,962	268
1941-42 ...	18,218	4,341,640	238	*	*	3,968,758	*
1942-43 ...	18,267	3,386,477	185	2,821	15,446	3,032,946	196
1943-44 ...	17,172	2,975,068	173	2,351	14,821	2,698,302	182
1944-45 ...	18,186	3,174,258	175	3,395	14,791	2,844,804	192
1945-46 ...	19,948	4,213,431	211	3,606	16,342	3,773,901	231

\* Not available.

‡ See Note \* to Table 394.

In 1938-39 more farmers grew wheat than in any season of the preceding two decades and the average wheat area per holding was also high. Then war-time restriction of wheat growing (see page 461) reduced the number of growers and the average area, but in 1945-46 the areas sown and harvested for grain were the greatest since 1941-42. On comparison with 1938-39, the number of holdings sown with wheat was slightly greater, but the areas per holding sown and harvested for grain were 54 and 33 acres less, respectively, and grain was stripped on 1,308 fewer holdings.

Particulars of wheat holdings in area series and wheat crops in production series up to 1940-41 were published in earlier issues of the Year Book. Later details are not available.

*Consumption of Wheat in New South Wales.*

Estimates of the average annual consumption of wheat in New South Wales in periods from 1892 to 1929 were published on page 552 of the Year Book for 1929-30. These were based upon total recorded production, less net exports, with due adjustment for recorded stocks and for seed wheat.

Additional data have been obtained since the year 1927 which enable estimates to be made of consumption exclusive of seed wheat and of wheat retained for use in the locality in which it is grown. The average quantity used for seed is approximately one bushel per acre.

For the purpose of the estimates, the wheat year is considered to extend from 1st December to 30th November, and at the latter date returns of stocks are obtained. As, however, in some years considerable quantities of new season's wheat arrive on the market in the latter half of November and as records of wheat in transit are difficult to obtain, it is not possible to estimate closely the consumption of individual years.

Prior to the war the average annual consumption of wheat in New South Wales was estimated to be about 22,700,000 bushels, viz., 13,750,000 bushels used as flour, 4,700,000 bushels as seed and 4,250,000 bushels for other purposes, mainly poultry feed.

During later years there was an increase in consumption due to expansion in pig and poultry farming, use of wheat for feeding stock in place of other fodder in short supply, increased usage for breakfast foods, and (till 1945) distillation of power alcohol from wheat to eke out war-time supplies of liquid fuel.

Full data regarding the interstate movement of wheat and flour have not been available during the war years. Indications are that the quantity of wheat consumed in New South Wales may have been between 24,000,000 and 29,000,000 bushels in 1940-41, 1941-42 and 1942-43, between 33,000,000 and 38,000,000 in 1943-44, between 37,000,000 and 38,000,000 bushels in 1944-45 and from 27,000,000 to 28,000,000 bushels in 1945-46. In each of the last two years, about 14,000,000 bushels were consumed as flour, and about 1,000,000 bushels for breakfast foods, etc.; stock feed absorbed about 17,600,000 bushels in 1944-45 and about 7,900,000 bushels in 1945-46, and approximately 4,200,000 and 4,800,000 bushels were used for seed wheat in the respective years.

#### *Wheat Sold for Stock Feed.*

The quantity of wheat sold for stock feed, etc., in New South Wales by the Australian Wheat Board was 4,964,000 bushels in 1940-41 and 7,414,000 bushels in 1941-42, of which it is believed that not more than 500,000 bushels in each year were used otherwise than for stock feeding. Sales for stock feed were 7,452,000 bushels in 1942-43, 13,280,000 bushels in 1943-44, 17,618,000 bushels in 1944-45 and 7,913,000 bushels in 1945-46, and probably more wheat than usual was fed to stock on wheat-growing holdings during these years.

Rationing of wheat sales for stock began early in 1945 following upon the very small harvest of 1944-45 and a large increase in stock-feed sales in the latter months of 1944. Distribution was controlled by a committee which included the Commonwealth Director of Agriculture as chairman and a representative of the Australian Wheat Board. The quotas allocated to New South Wales were 14,000,000 bushels for the eleven months ended November, 1945, 7,100,000 bushels in 1945-46 and 10,200,000 bushels in 1946-47.

The Australian Wheat Board's selling prices for wheat for stock feeding, per bushel, truck lots, f.o.r. port, bulk basis from January, 1940, were as follows:—

	Per bushel.		Per bushel.
	s. d.		s. d.
1940—Jan. to Apr. 11 ...	3 10½	1942—April 16 .....	3 3¾
April 12 .....	4 1	1945—Nov. 28 .....	4 3
July 29 .....	4 0¼	1946—Dec. 13 .....	4 11
1941—Nov. 13 .....	3 9¾		

For the reduction of 6d. per bushel from 16th April, 1942, the Board was reimbursed by Commonwealth subsidy. Subsidy ceased from 13th December, 1946 when the price was increased to the home consumption price of wheat.

#### *Marketing of Wheat.*

The development of the wheat industry in New South Wales is dependent largely on world demand, on efficiency of production, facilities for gaining access to overseas markets, and on the maintenance of such internal

conditions that it will pay local farmers to grow wheat. In ordinary circumstances the price of wheat for export is determined by world's parity, which fluctuates with the world supply and demand; the market for the exportable surplus of local wheat is found chiefly in Europe, but quantities of flour were sent to the countries and islands in the Pacific and Indian Oceans. For some years after 1930 large quantities of wheat were shipped to China and Japan.

The market for Australian wheat in Europe is affected by the competition of great wheat-producing countries nearer the market—the United States, Canada, the Argentine and Russia—which derive advantages from shorter distances and lower ocean freights. These advantages are counteracted to some extent by the greater land haulage necessary from the interior to the coast of some of these countries. All wheat grown in Australia since the outbreak of war has been handled in compulsory pools controlled by the Australian Wheat Board. It is the responsibility of the Board to find markets for the wheat at home and abroad.

The movement of wheat and flour oversea from New South Wales in the years 1933 to 1946 is shown below; information as to interstate movement since 1939 is not available. The particulars for the respective years relate to the twelve months ending 30th November, and represent the movement following each harvest. Flour is expressed at its equivalent in wheat, viz., 48 bushels of grain to 2,000 lb. of flour.

TABLE 406.—Oversea Exports of Wheat and Flour and Stocks in New South Wales.

Year ended 30th Nov.		Export Oversea from N.S.W.		Recorded Stocks at 30th Nov.	Year ended 30th Nov.		Export Oversea from N.S.W.		Recorded Stocks at 30th Nov.
		Wheat.	Flour.	Wheat and Flour.			Wheat.	Flour.	Wheat and Flour.
Expressed in thousand bushels of wheat.									
1933	...	34,669	11,256	6,110	1940	...	19,966	15,266	20,803
1934	...	10,430	11,513	13,302	1941	...	1,969	12,526	6,232
1935	...	16,324	12,666	5,980	1942	...	3,761	4,475	16,055
1936	...	16,442	8,828	2,719	1943	...	2,208	5,650	25,859
1937	...	19,513	9,187	3,272	1944	...	305	12,862	19,090
1938	...	16,807	10,836	4,134	1945	...	33	4,384	2,082*
1939	...	13,993	15,808	6,733	1946	...	6,181	14,841	11,857

\* Revised.

#### Grading of Wheat.

Wheat for export is marketed almost entirely on the basis of a single standard known as f.a.q. or fair average quality. In New South Wales the standard is determined by a committee under supervision of the Grain Trade Section of the Chamber of Commerce, representatives of the Farmers and Settlers' Association and the Department of Agriculture. Samples obtained from each of the wheat districts are weighed in proportions based on production, and an average is struck, to be used as a standard in wheat export transactions. The Schopper weighing machine is used.

The following comparison shows the standard adopted in New South Wales for each of the past ten seasons, and the date on which it was fixed in each year:—

TABLE 407.—Wheat, F.A.Q., Standard, 1937-38 to 1946-47 (N.S.W.).

Season.	Date Fixed.	Weight of Bushel of Wheat. f.a.q.	Season.	Date Fixed.	Weight of Bushel of Wheat. f.a.q.
		lb.			lb.
1937-38 ...	3rd Feb., 1938 ...	64	1942-43 ...	5th Feb., 1943 ...	63
1938-39 ...	26th Jan., 1939 ...	64½	1943-44 ...	4th Feb., 1944 ...	64¼
1939-40 ...	26th Jan., 1940 ...	63½	1944-45 ...	2nd Feb., 1945 ...	63
1940-41 ...	24th Jan., 1941 ...	62¾	1945-46 ...	15th Feb., 1946 ...	63½
1941-42 ...	21st Jan., 1942 ...	64	1946-47 ...	28th Jan., 1947 ...	62½

The weights shown above are those used for guidance in determining whether particular lots of wheat are at or above fair average quality, but not as a measure of quantity. Normally wheat is sold in New South Wales by weight (bushel of 60 lb.), and not by volume.

In certain seasons, when a substantial quantity of the grain was pinched or damaged by adverse seasonal conditions, a "second" grade was determined. A separate Australian pool was formed to handle "under quality" wheat grown in 1939-40. Wheat weighing from 54 lb. to 59 lb. (chondrometer measure) per bushel was received into this pool.

### *Bulk Handling.*

The circumstances leading to the erection of bulk handling facilities were described at page 584 of the Year Book for 1928-29.

The grain elevator system consists of a concrete and steel shipping elevator at Sydney, with a storage capacity of 7,500,000 bushels at one filling, a terminal elevator at Newcastle, with a capacity of 800,000 bushels at one filling, and 180 elevators situated at the more important wheat receiving stations throughout the State. These country elevators, which have direct access to rail, have a storage capacity at one filling of 24,478,000 bushels.

The terminal elevators at Sydney and Newcastle have been built and equipped for receiving, handling and shipping classified wheats, and facilities for cleaning and conditioning are provided. Electric power is used. The terminal elevator at Sydney is connected with the railway system of the State by four lines of rail, and has a receiving capacity of 6,000 tons (approximately 224,000 bushels) per day, and a shipping capacity of 12,000 tons (approximately 448,000 bushels) per day of eight hours. At Newcastle the rates are 2,000 tons and 8,000 tons per day respectively.

The country elevators, with few exceptions, are equipped for receiving wheat in bulk from farmers' waggons and loading into bulk trucks. The more modern are fitted with weighbridges for inward weighing, and the majority are equipped with outward scales. The storage capacity of the individual country elevators varies from 30,000 bushels to 350,000 bushels. They are built of reinforced concrete and steel with corrugated galvanised iron coverings, and practically all of them are capable of receiving classified or graded wheat in bulk.

Wheat is generally transported from the farms to the silos in bags fastened by clips or sewn, the bags being emptied and returned to the farmer for subsequent use, but some farmers utilise bulk waggons. For conveyance from the country stations to the terminal, special railway trucks are provided.

Under normal conditions the owner receives a bulk wheat warrant showing particulars of the quantity and quality of the wheat, and the place where it was originally received. The warrant is a negotiable document transferable by endorsement of the owner, and delivery of the wheat is made on the production of the warrant, properly endorsed, and the payment of prescribed fees.

Upon the introduction of war-time control by the Australian Wheat Board and the inauguration of Pools for the 1939-40 and following harvests, negotiable wheat warrants formerly issued by the Government Grain Elevators were replaced by a "Wheat Warrant and Claim for Compensation." This is a certificate that the grower named therein has delivered the quantity set out, and is handed direct by the Government Grain Elevators to a licensed receiver nominated by the grower. Advances are made to the growers against the wheat by the licensed receivers as they are approved by the Board.

The bulk handling system was first put into operation in 1920-21 and its development is shown in the following table:—

TABLE 408.—Grain Elevators—Wheat Received, 1920-21 to 1945-46.

Season.	Number of Elevators Available in Country Districts.	Storage Capacity of Elevators Available in Country Districts.*	Wheat Received.			Proportion of Wheat Received in Elevators.	
			In Country Elevators.	In Terminal Elevators from Non-Silo Stations.	Total.	To Total Crop.	To Total Quantity Received at Rail.
		bushels.	bushels.	bushels.	bushels.	per cent.	per cent.
1920-21 ...	28	5,450,000	.....	.....	1,941,694	3·5	4·1
1925-26 ...	62	13,500,000	8,295,436	841,185	9,136,621	27·0	34·9
1930-31 ...	99	16,373,000	22,948,114	697,295	23,645,409	35·9	41·3
1931-32 ...	105	16,613,000	23,877,542	2,123,344	26,000,886	47·6	52·0
1932-33 ...	111	17,183,000	33,954,534	500,877	34,455,411	43·7	51·7
1933-34 ...	119	17,693,000	21,229,928	566,575	21,796,503	38·2	46·9
1934-35 ...	149	21,083,000	21,509,227	Nil.	21,509,227	44·2	54·6
1935-36 ...	158	21,773,000	24,811,726	295,897	25,107,623	51·4	62·8
1936-37 ...	175	23,123,000	29,087,579	142,981	29,230,560	52·5	64·3
1937-38 ...	175	23,223,000	32,533,478	146,566	32,680,044	59·3	73·5
1938-39 ...	175	23,323,000	27,590,664	307,776	27,898,440	46·6	59·9
1939-40 ...	175	23,523,000	38,912,339	295,699	39,208,038	51·2	62·3
1940-41 ...	175	23,548,000	11,453,207	7,140	11,460,347	47·9	74·5
1941-42 ...	180	24,478,000	25,161,215	385,137	25,546,352	52·7	68·0
1942-43 ...	180	24,478,000	26,080,372	Nil.	26,089,372	50·5	61·5
1943-44 ...	180	24,478,000	19,276,772	Nil.	19,276,772	40·6	50·4
1944-45 ...	180	24,478,000	5,467,138	Nil.	5,467,138	31·9	53·1
1945-46 ...	180	24,478,000	25,825,916	Nil.	25,825,916	41·3	50·8

\* At one filling.

The quantity of wheat which could be received in 1942-43 and 1943-44 was limited because much wheat from earlier harvests remained in the elevators.

The following table shows the financial operations in connection with the grain elevators in the last seven years. The capital cost to 30th June, 1946, consisted of £5,300,000 expended from the General Loan Account and £30,836 from the Unemployment Relief Fund. Earnings are paid into and expenses defrayed from the Consolidated Revenue Fund. The charge for interest and exchange on interest remitted overseas, as shown in the table, represents the amount calculated at the average rate paid on the public debt of the State.

TABLE 409.—Grain Elevators—Finances.

Year ended 30th June.	Capital cost (to 30th June).	Receipts.				Payments (Working and Sundry Expenses).	Charge for Interest and Exchange.
		Handling Fees.	Storage Fees.	Other.	Total.		
	£	£	£	£	£	£	£
1939	5,214,509	218,136	162,169	9,645	389,950	108,132	189,436
1940	5,231,931	298,836	129,424	30,376	458,636	191,375	190,991
1941	5,325,514	141,054	186,373	4,863	332,290	107,529	193,223
1942	5,330,776	220,475	125,893	15,936	362,304	106,413	193,155
1943	5,330,806	158,463	74,038	3,948	236,449	116,962	191,575
1944	5,330,836	279,972	23,921	4,725	308,618	99,364	192,451
1945	5,330,836	376,691	...	3,538	380,229	73,355	192,064
1946	5,330,836	334,495	...	4,621	339,116	115,448	187,088

After meeting expenses (including interest and exchange) the operations of the Government Grain Elevators resulted in a surplus of £62,736 in 1941-42, a deficit of £72,088 in 1942-43, and surpluses of £16,803 in 1943-44, £114,810 in 1944-45 and £36,580 in 1945-46.

Under the system of pooling wheat, described on page 464, fees for the handling of wheat by the elevators are paid by the Australian Wheat Board. Since November, 1942, the basis of payment has been actual working costs plus an allowance for capital charges on bulk handling equipment.

#### *Wheat Arrivals at Railway Depots.*

As a rule small quantities of new season's wheat become available towards the end of November, the actual time varying under seasonal influences. Usually all but a small proportion of the crop intended for sale is sent from farm to railway for transport before the end of February. The quantity of wheat delivered to rail by growers (exclusive of New South Wales wheat consigned to the Wheat Board in Victoria) was 10,288,159 bushels, including 4,821,021 bushels as bagged wheat, in 1944-45, and 50,841,107 bushels, of which 25,015,191 bushels were bagged, in 1945-46.

#### *Wheat Ocean Freights.*

In ordinary circumstances, in the conditions governing the marketing of wheat abroad, the shipping space offering and its cost are very important factors. Under condition of war most of the shipping was under Government control, the space available for wheat was limited, and costs of ocean transport increased considerably. Shipping difficulties continued in the early post-war years and United Kingdom shipping remained subject to direction.

Information regarding rates of ocean freight from Sydney to London are shown on page 156 of this Year Book. The rate of freight (in English currency) on wheat, Sydney to London, was 120s. per ton at 30th June, 1946, compared with 135s. 6d. from 1941 to 1944 and 31s. 3d. to 33s. 9d. in 1939.



*Prices of Wheat.*

Information regarding the prices of wheat in Sydney in each year since 1911 is shown in the following table. The figures for the years 1865 and onward were published in the Year Book for 1919.

The prices quoted in the table for the years 1911 to 1936 inclusive are per imperial bushel (60 lb.) of f.a.q. wheat in three-bushel bags; the bag was sold with the wheat and was included in the weight paid for as wheat. From 1937 the prices are per bushel of f.a.q. bulk wheat. The monthly averages represent the mean of daily prices, and the annual average is the mean of the monthly averages. The prices quoted for the years 1915 to 1921 are those officially fixed for wheat for home consumption (imported wheat in 1920); the quotations 1922 to 1939 (October) are shippers' and millers' buying prices. Since October, 1939, prices of wheat have been fixed by the Australian Wheat Board, and the Sydney price for bulk wheat for flour for local consumption has been 3s. 11½d. since August, 1940.

Prices charged for wheat for stock feed are shown on page 454.

TABLE 410.—Prices of Wheat, Sydney, 1911 to 1947.

Year.	Price of Wheat, Sydney.			Year.	Price of Wheat, Sydney.		
	February.	March.	Average for Year.		February.	March.	Average for Year.
	Per bushel. s. d.	Per bushel. s. d.	Per bushel. s. d.		Per bushel. s. d.	Per bushel. s. d.	Per bushel. s. d.
1911 ...	3 5	3 3	3 6	1927 ...	5 1½	5 0¾	5 5
1912 ...	3 9½	3 8½	4 1	1928 ...	5 2	5 5½	5 1½
1913 ...	3 6½	3 7	3 7½	1929 ...	4 8½	4 7½	4 10½
1914 ...	3 8	3 9½	4 1½	1930 ...	4 8½	4 5	3 10½
1915 ...	5 6	5 6	5 5	1931 ...	2 1½	2 1½	2 5½
1916 ...	5 1¾	5 0½	4 10	1932 ...	3 2	3 1	3 0¾
1917 ...	4 9	4 9	4 9	1933 ...	2 8½	2 9½	2 10½
1918 ...	4 9	4 9	4 9	1934 ...	2 5½	2 6½	2 8½
1919 ...	5 0	5 0	5 1½	1935 ...	2 11¾	3 1	3 0¾
1920 ...	8 5	8 10	8 7½	1936 ...	3 7	3 8	4 2½
1921 ...	9 0	9 0	8 8	1937 ...	5 0½	5 4¾	5 2
1922 ...	5 2	5 11	5 8	1938 ...	4 5½	4 1½	3 6½
1923 ...	5 8	5 7	5 3½	1939 ...	2 5½	2 4	2 7
1924 ...	4 7½	4 7	5 5	1940 ...	3 9½	3 9½	3 11
1925 ...	6 9½	6 3¾	6 2½	1941* ...	3 11½	3 11½	3 11½
1926 ...	5 11¾	5 8¾	6 2				

\* No change to October, 1947.

In the above table the prices of wheat for the year 1940 onward are not comparable with those shown for earlier years. As explained at page 436 prices in the more recent years need to be considered in conjunction with flour tax in arriving at the purchase price to consumers of wheat consumed locally as flour. The average prices received by wheat growers were indicated fairly reasonably by average shippers' and millers' buying prices (with adjustment for freight) until the fixation of prices by the Wheat Board commenced in October, 1939. Since then the average return to farmers has been governed by payments from the wheat pools in disbursement of moneys accrued from local and overseas sales and from proceeds of the flour tax, etc., and is indicated in succeeding paragraphs. The

trend in export prices of Australian wheat since 1938 is illustrated in the following table:—

TABLE 411.—Export Prices of Wheat, Australia, 1938 to 1947.\*

Average during—	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.
	Pence per bushel, f.a.q., f.o.r., ports.									
March ...	47-96	21-19	47-00	(50-00)	50-00	51-00	57-00	†	122-00	187-00
June ...	41-85	28-68	48-00	(50-00)	50-00	(51-00)	60-00	†	122-00	196-00
September ...	32-72	29-93	(47-25)	(50-00)	(50-00)	51-00	69-00	†	134-00	204-00
December ...	28-96	(35-00)	(47-75)	(50-00)	50-00	57-00	75-00	†	164-00	
Calendar year ...	40-72	29-37	47-50	50-00	50-00	51-75	64-00	†	130-90	

\* Average shippers' limits, f.o.r. ports for growers f.a.q. bagged and bulk lots to October, 1939. From November, 1939, the quotations are approximate (based on sales by Australian Wheat Board) but are comparable with prices shown for earlier years. † No sales. Figures in brackets are nominal.

### *Estimated Return to Farmers for Wheat.*

It was very difficult to determine satisfactorily the estimated net return to farmers prior to 1927 because adequate data were not available. Latterly additional information has been obtained and the averages as estimated for 1927 and subsequent years to 1939 are close approximations. The estimated net return for each of these years represents the weighted average price of wheat delivered at country railway sidings less the net cost of bags.

The net return to farmers in 1939-40 and later seasons has been estimated on the basis of advances by the Australian Wheat Board and were as follow:

TABLE 412.—Estimated Return to Wheat Farmers 1910-11 to 1945-46 (as at railway, country sidings.)

Season.	Estimated Net Return to Farmer per bushel.	Season.	Estimated Net Return to Farmer per bushel.	Season.	Estimated Net Return to Farmer per bushel.	Season.	Estimated Net Return to Farmer per bushel.
	s. d.		s. d.		s. d.		s. d.
1910-11 ...	3 1	1919-20 ...	7 6	1928-29 ...	4 0	1937-38 ...	3 4-5
1911-12 ...	3 3	1920-21 ...	7 0	1929-30 ...	3 2	1938-39 ...	2 2-8
1912-13 ...	3 3	1921-22 ...	4 8	1930-31 ...	1 7	1939-40 ...	2 11-9
1913-14 ...	3 2	1922-23 ...	4 8	1931-32 ...	2 11-5	1940-41 ...	3 7
1914-15 ...	5 1	1923-24 ...	4 7	1932-33 ...	2 6	1941-42 ...	3 3-6
1915-16 ...	4 0	1924-25 ...	5 7	1933-34 ...	2 5-5	1942-43 ...	3 11-7
1916-17 ...	2 10	1925-26 ...	5 1	1934-35 ...	2 11-2	1943-44 ...	4 9-6
1917-18 ...	4 1	1926-27 ...	4 6	1935-36 ...	3 4	1944-45 ...	5 2-8
1918-19 ...	4 5	1927-28 ...	4 7	1936-37 ...	4 8	1945-46 ...	6 11-1

Payments to farmers in the nature of bounty, drought relief, etc., are included in the table; these were as follow:—

per bushel.	per bushel.	per bushel.	per bushel.
d.	d.	d.	d.
1931-32 ... 4-3	1935-36 ... 2-8	1940-41 ... 5-8	1943-44 ... 4-1
1932-33 ... 3-1	1938-39 ... 5-3	1941-42 ... 1-5	1944-45 ... 19-1
1933-34 ... 3-8	1939-40 ... 1-0	1942-43 ... 1-6	1945-46 ... 1-7
1934-35 ... 5-5			

In calculating the averages (per bushel) shown above, drought relief paid in some seasons on acreages which failed to produce a minimum yield of wheat was taken into account.

*Government Assistance to Wheatgrowers.*

Details of the measures taken by the Commonwealth and State Governments to assist wheatgrowers during the pre-war agricultural depression and the grants distributed in the years 1931-32 to 1935-36 are given in earlier issues of this Year Book. The money for these grants was obtained principally from the tax on flour used for local consumption. In consequence of a recovery in wheat prices no assistance was given in 1936-37 or 1937-38.

In 1938 prices of wheat fell sharply and a plan for stabilisation of the wheat industry in Australia was introduced as a joint measure by Commonwealth and States with the object of ensuring to growers a payable price.

*Plan for Stabilisation of Australian Wheat Industry, 1938.*

Under the plan each State fixed a price of flour for home consumption approximately equivalent to the price to be charged for flour if wheat were 5s. 2d. per bushel at seaboard. The Commonwealth on its part imposed a tax on flour in the form of an excise duty equal to the difference between the millers' price of flour and the "home consumption" price. Alternately it was provided that a tax would be imposed on wheat if the price of wheat rose above 5s. 2d. per bushel, the proceeds to be applied in stabilising the cost of wheat for home consumption flour. The price of wheat did not rise to this level while the plan was in operation.

A Commonwealth Stabilisation Advisory Committee was appointed to assist in the administration of the plan and to advise the Minister as to the rate of tax on flour (or wheat). There was also an Advisory Committee in each State and the States were empowered to fix prices of other wheat products as well as flour.

The proceeds of the flour tax were paid into a Commonwealth Trust Account—the Wheat Stabilisation Fund—and allocated to the States for distribution to wheat farmers.

In New South Wales the Rural Bank through its Rural Industries Agency was constituted as the authority for distribution of funds under the plan as well as other moneys available for the assistance of farmers.

*War-time Stabilisation and Marketing of Wheat.*

Upon the outbreak of war the Commonwealth Government assumed control of stocks of wheat, the growing crop and future wheat production in Australia during the war, and the Australian Wheat Board was constituted on 21st September, 1939, to act on behalf of the Government in the acquisition, handling, and disposal of the wheat.

Financial arrangements under current legislation relating to the existing stabilisation plan were suspended until six months after the war. The flour tax was continued and proceeds (except certain grants to Tasmania and to the States for farmers in marginal wheat areas) became available as part of the moneys to be distributed to growers from whom wheat is acquired.

The growers deliver their wheat to receivers authorised by the Wheat Board. The Board determines prices of wheat for local consumption and negotiates sales for export and from time to time distributes advances to

growers in respect of wheat acquired from them. For each season's wheat a special pool is constituted, as shown on page 464.

In November, 1940, National Security Regulations were issued to make provision for war-time stabilisation of the wheat industry in Australia. These regulations were continued until 31st December, 1947, by the Defence (Transitional Provisions) Act, 1946. The principal features of the plan are (1) the payment of a guaranteed price to farmers; (2) the marketing of all wheat (grain) by the Australian Wheat Board; (3) the registration of existing wheat farms and the licensing of farmers to grow wheat on registered farms under such conditions as to acreage, etc., as may be imposed; and (4) when a heavy crop is in prospect, directions may be given as to acreage to be cut for hay, and some financial provision may be made in respect of the hay. The plan also provided that in years of high price one half of any surplus over the guaranteed price should be used in meeting debits resulting from payments to the industry in years of low price, but this provision was repealed in April, 1944.

The Wheat Industry Stabilisation Board of four members was appointed to advise the Minister and the Australian Wheat Board on matters connected with control and stabilisation of the industry. The Chairman of the Board is also Chairman of the Australian Wheat Board, and, in each State, there is a Stabilisation Committee of three members, one representing the Commonwealth and two the wheatgrowers.

The Australian Wheat Board (as reconstituted in October, 1942) consists of a chairman who represents the Commonwealth Government, seven members representing wheatgrowers and one representing the flour millers of Australia. There is also a Wheat Committee in each State.

The Board, subject to direction by the Minister, may purchase and dispose of wheat, wheat products or cornsacks. It may grist or arrange for gristing wheat into flour and dispose of the flour and control the handling, storage and shipment of wheat and flour. The Board pays into an account at the Commonwealth Bank moneys accruing from sales effected by it and moneys appropriated by Parliament or loans borrowed for its use by the Commonwealth. The moneys are expended in defraying costs of administration and making payments to growers and other payments authorised by the Regulations.

The Wheat Stabilisation Board controls the registration of wheat farms and the licensing of growers and determines the maximum acreage to be sown with wheat, and may require growers to cut part of their crops for hay.

Particulars of the number of licenses issued (including those issued to share farmers) and the area covered in New South Wales by license in each season 1941-42 to 1946-47 are as follow:—

Year.	Licenses Issued.	Area (grain) Licensed.	Year.	Licenses Issued.	Area (grain) Licensed.
	No.	Acres.		No.	Acres.
1941-42    ...    ...	24,022	4,285,516	1944-45    ...    ...	21,566	3,992,000
1942-43    ...    ...	19,833	3,666,573	1945-46    ...    ...	23,715	4,927,000
1943-44    ...    ...	19,884	3,692,362	1946-47    ...    ...	24,992	5,543,329

The price guaranteed to growers for the 1941-42 wheat harvest was 3s. 10d. per bushel ex trucks, terminal ports for bagged wheat (bulk wheat 3s. 8d. per bushel) less costs of receiving, handling, rail freight, storage and placing on ship board.

In respect of the 1942-43 to 1944-45 harvests the guaranteed price applied only to a quota, viz., the first 3,000 bushels of the season's crop delivered by each grower. For such wheat the guaranteed prices per bushel delivered at grower's siding were 4s. for bagged and 3s. 10d. for bulk 1942-43 wheat, and 4s. 1½d. and 3s. 11½d. respectively, for 1943-44 and 1944-45 wheat; charges for rail freight, handling, selling, etc., were paid by the Wheat Board as part of pool expenses, but freight was deducted from the second or later advances on quota or non-quota wheat.

The Wheat Board also acquired non-quota wheat (deliveries by a grower in excess of 3,000 bushels) of these three seasons. An advance was paid on this wheat shortly after delivery and further payments as sales were effected, so that growers received for "non-quota" wheat the amount derived from sales, minus actual expenses of handling and selling it. The first advance paid for bagged "non-quota" wheat at grower's siding was 2s. per bushel in 1942-43 and 2s. 1½d. in 1943-44 (2d. less for bulk). On 1944-45 "non-quota" wheat the first advance was increased to 3s. per bushel for bagged and 2s. 10d. for bulk wheat to encourage greater production. Quotas were not applied to 1945-46 or 1946-47 wheat; in these seasons the guaranteed prices per bushel were 4s. 4d. for bagged and 4s. 1d. for bulk wheat at growers' siding.

The increase of 1½d. per bushel for 1943-44 and 1944-45 wheat was made to offset the increase in costs of harvesting as the result of an award of the Arbitration Court, fixing rates of wages and hours of harvesters.

#### *Post-War Stabilisation of the Wheat Industry.*

The Wheat Industry Stabilisation and the Wheat Export Charges Acts were passed in 1946 to provide a post-war plan to stabilise the wheat-growing industry in Australia. At a late date in 1947 certain States, including New South Wales, had not passed the complementary legislation without which effect cannot be given to the plan, and therefore, the 1947-48 crop is being dealt with under the war-time scheme described above.

The features of the post-war plan, which, initially, was to cover the seasons ending 30th September, 1946 to 1950, were a guaranteed price to growers (5s. 2d. per bushel, f.o.r. ports for f.a.q. bagged wheat) and the creation of a stabilisation fund to which growers would contribute in seasons when prices are high (up to 50 per cent. of the excess of export prices over the guaranteed price) and from which deficiencies in seasons when realisations fall short of the guaranteed price would be met. Should the fund become exhausted, funds to maintain the guaranteed price are to be provided from Commonwealth Consolidated Revenue.

The growers' contribution would be collected by a charge on all wheat and wheat products of the 1945-46 and 1946-47 crops exported other than by the Board, and all exports in subsequent seasons, and by a tax on all wheat of the 1945-46 and 1946-47 crops acquired by the Wheat Board. It is provided that the scheme be reviewed from time to time to consider its extension for further periods. In its operation the plan would be administered by authorities and under arrangements similar to those of the war-time scheme described previously.

*Wheat Pools Managed by the Australian Wheat Board.*

Wheat of each harvest acquired and marketed by the Australian Wheat Board on behalf of the Commonwealth Government is treated in a separate pool. No. 1 pool comprised the residue of the 1938-39 crop, most of which was held by traders when requisitioned. In 1939-40 and 1941-42 relatively small quantities of inferior grade wheat were marketed in Pools No. 3 and No. 5A, respectively, but no New South Wales wheat entered Pool No. 5A. Growers received approximately 3d. per bushel less for this wheat than for f.a.q. wheat in Pools No. 2 and No. 5. Particulars of wheat delivered to the Board and of advances made to growers are shown below:—

TABLE 413.—Australian Wheat Pools, 1938-39 to 1946-47.

Pool No.	Harvest.	Wheat Acquired in--		Advances to Farmers.*					
		New South Wales.	All States.	Total Amount.		Average per bushel (All States).			
				New South Wales.	All States.	Basis.	Bagged.	Bulk.	
		bus. (000).	bus. (000).	£ (000).	£ (000).	Terminal Ports—	s. d.	s. d.	
1	1938-39	6,226	17,840	†	2,427	F.O.B. ...	2 9-9	2 7-9	
2	1939-40	65,350	194,106	} 10,299	31,353	Ex Trucks ...	3 8	3 6	
3	1939-40	1,338	1,338			" ...	3 5	3 3	
4	1940-41	16,919	63,659	2,880	11,240	" ...	4 0-4	3 9-5	
5	1941-42	41,230	153,944		{ 7,007	{ 27,120	" ...	4 0-6	3 9-1
5A	1941-42						" ...	3 9-6	3 6-1
6	1942-43	44,709	141,990	9,147	29,877	Country Sidings—†			
						Quota ...	4 8-5	4 5-5	
7	1943-44	40,879	94,756	10,117	23,795	Non-quota ...			
						Quota ...	5 6-2	5 3-7	
8	1944-45	12,168	38,826	2,716	8,840	Non-quota ...			
						Quota ...	5 0-8	4 9-8	
9	1945-46	54,888	123,825	16,225		Non-quota ...			
						All wheat ...	6 6-3	6 2-8	

\* As at 31st October, 1947.

† Not available.

‡ Freight (average in New South Wales 5-55d. per bushel) to be deducted from amounts stated.

*Rate of Commonwealth Flour Tax.*

The rate of the Commonwealth Flour Tax, as varied since July, 1939, until 22nd December, 1947, when it lapsed, was as follows. Details as to the earlier changes in the rate are shown on page 728 of the 1937-38 issue of the Year Book.

TABLE 414.—Rates of Flour Tax, 1939 to 1947.

Date of Change.	Rate of Tax per 2,000 lb. net weight of Flour.	Date of Change.	Rate of Tax per 2,000 lb. net weight of Flour.
	£ s. d.		£ s. d.
16th July, 1939 ...	5 10 0	23rd December, 1939 ...	1 12 3
21st July, 1939 ...	6 0 0	10th February, 1940 ...	1 16 7
11th August, 1939 ...	6 2 9	17th February, 1940 ...	2 1 0
1st September, 1939 ...	5 14 9	27th February, 1940 ...	2 5 5
13th September, 1939 ...	5 2 9	22nd April, 1940 ...	1 15 5
25th October, 1939 ...	4 12 6	6th August, 1940 ...	1 18 5
22nd November, 1939 ...	4 2 3	30th September, 1940 ...	2 2 10
7th December, 1939 ...	3 5 3	23rd October, 1940 ...	*2 8 10
8th December, 1939 ...	2 2 3		

\* Current rate to December, 1947.

In commercial practice flour is sold in 150 lb. bags and a ton comprises 1,970 lb. of flour, the containers weighing approximately 30 lb. Flour tax is levied only on the flour and thus on a commercial ton the rate is  $\frac{1970}{2000}$  of the rate per ton of 2,000 lb. net weight of flour. At the rate of tax current in October, 1947, the tax on a commercial ton was £2 8s. 1d., approximately.

### MAIZE:

Production of maize in New South Wales attained its maximum (7,594,000 bushels) in 1910-11. Thereafter, due in part to the sowing of pastures with lucerne and grasses of vigorous growth and high nutritive value, the production of maize declined steadily, and the average production in recent years has been less than 3,000,000 bushels. Trends in maize growing are illustrated in the graph at page 466. The following comparison relates to maize-growing since 1906-07:—

TABLE 415.—Maize Area and Production, 1906-07 to 1945-46.

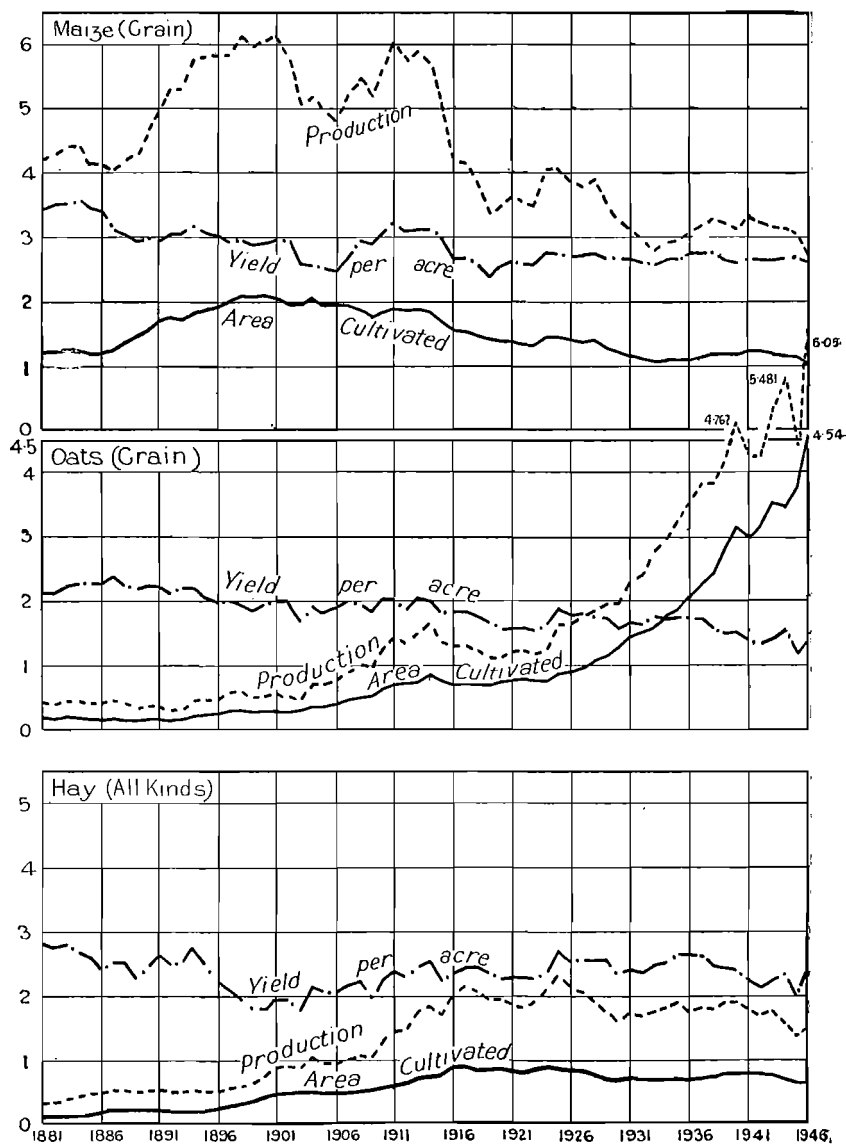
Season.	Area under Maize for Grain.	Production.		Farm Value of Crop.	
		Total.	Average yield per Acre.	Total.	Per Acre.
Average—	acres.	bushels.	bushels.	£	£ s. d.
1907-11 ...	188,384	6,030,855	32.0	834,050	4 8 7
1917-21 ...	139,266	3,630,680	25.9	931,000	6 13 8
1922-26 ...	143,870	3,874,670	26.9	813,910	5 13 2
1927-31 ...	119,479	3,167,620	26.5	662,460	5 10 10
1932-36 ...	114,406	3,060,320	26.8	489,330	4 5 10
1937-41 ...	124,308	3,297,500	26.5	641,260	5 3 2
1942-46 ...	102,123	2,744,710	26.9	751,810	7 7 3
Year—					
1937-38 ...	125,049	3,403,140	27.2	716,080	5 14 6
1938-39 ...	122,201	2,905,020	23.8	532,590	4 7 2
1939-40 ...	115,856	2,832,810	24.4	507,550	4 7 7
1940-41 ...	142,147	4,043,985	28.4	741,390	5 4 4
1941-42 ...	117,262	3,141,720	26.8	510,530	4 7 1
1942-43 ...	103,591	2,814,765	27.2	809,240	7 16 3
1943-44 ...	103,237	2,769,057	26.8	876,870	8 9 10
1944-45 ...	94,107	2,437,317	25.9	751,510	7 19 9
1945-46 ...	92,416	2,560,695	27.7	810,890	8 15 6

In addition to the area harvested for grain, maize is used as green fodder for stock in the dairying districts. The area for this purpose was 35,362 acres in 1943-44, 34,437 acres in 1944-45, and 31,573 acres in 1945-46.

Maize is cultivated chiefly in the valleys of the coastal rivers, where both soil and climate are peculiarly adapted to its growth. Good results are

# MAIZE, OATS AND HAY GROWING IN NEW SOUTH WALES.

Area, Production and Average Yield,  
1876-77 to 1945-46.



The Graphs have been prepared on the basis of averages of the five seasons ended in each year as shown.

The numbers at side of the Graphs represent 100,000 of acres, millions of bushels of production, and tens of bushels of yield per acre in the case of maize and oats, and millions of acres, 500,000 tons of production and tons of cwts. of yield per acre of hay.



obtained also on the northern tablelands. The following statement shows the area of maize harvested for grain, production and average yield in each division of New South Wales in the last three seasons:—

TABLE 416.—Maize in Divisions, 1943-44 to 1945-46.

Division.	1943-44.			1944-45.			1945-46.		
	Area.	Yield—Bush.		Area.	Yield—Bush.		Area.	Yield—Bush.	
		Total.	Per acre.		Total.	Per acre.		Total.	Per acre.
Coastal—	acres.			acres.			acres.		
North ... ..	39,341	1,245,207	31·7	40,654	1,301,478	32·0	40,779	1,256,796	30·8
Hunter and Manning ...	15,675	495,744	31·6	11,837	310,128	26·2	11,779	330,048	28·0
Metropolitan ... ..	525	14,061	28·5	450	7,728	17·2	426	10,536	24·7
South ... ..	4,951	124,464	25·1	4,783	162,132	33·9	5,201	227,961	43·8
Total ... ..	60,492	1,880,376	31·1	57,724	1,781,466	30·9	58,185	1,825,341	31·4
Tableland—									
Northern ... ..	24,274	554,103	22·8	25,670	542,886	21·1	27,056	613,674	22·7
Central ... ..	2,435	43,602	17·9	1,336	15,351	11·5	1,659	39,735	24·0
Southern ... ..	91	1,419	15·6	51	153	3·0	121	2,976	24·6
Total ... ..	26,800	599,124	22·4	27,057	558,390	20·6	28,836	656,385	22·8
Western Slopes ... ..	15,330	282,846	18·5	9,267	97,182	10·5	5,338	78,048	14·6
Central Plains, Riverina, and Western Division.	615	6,711	10·9	59	279	4·7	57	921	16·2
All Divisions ... ..	103,237	2,769,057	26·8	94,107	2,437,317	25·9	92,416	2,560,695	27·7

# OATS.

Experience in the growing of oats for grain is illustrated graphically on the preceding page. The following table gives statistics of the cultivation of oats for grain since 1906-07:—

TABLE 417.—Oats, Grain—Area and Production, 1906-07 to 1945-46.

Season.	Area under Oats for Grain.	Production.		Farm Value of Oats for Grain.	
		Total.	Per Acre.	Total.	Per Acre.
Annual Average—	acres.	bushels.	bushels.	£	£ s. d.
1907-11 ... ..	70,303	1,409,040	20·0	151,040	2 3 0
1912-16 ... ..	72,350	1,304,863	18·0	179,156	2 9 6
1917-21 ... ..	78,000	1,208,660	15·5	214,220	2 14 11
1922-26 ... ..	91,022	1,623,610	17·8	275,870	3 0 8
1927-31 ... ..	140,972	2,301,560	16·3	283,440	2 0 3
1932-36 ... ..	207,226	3,562,220	17·2	280,700	1 7 1
1937-41 ... ..	306,516	4,218,626	13·8	408,690	1 6 8
1942-46 ... ..	454,160	6,052,040	13·3	765,990	1 13 9
Year—					
1937-38 ... ..	255,144	3,395,130	13·3	480,980	1 17 8
1938-39 ... ..	399,449	4,831,110	12·1	493,180	1 4 8
1939-40 ... ..	405,262	6,903,990	17·0	431,500	1 1 4
1940-41 ... ..	236,910	1,995,340	8·4	224,480	0 18 11
1941-42 ... ..	303,860	4,118,090	13·6	428,970	1 8 3
1942-43 ... ..	431,299	7,338,213	17·0	764,400	1 15 5
1943-44 ... ..	374,205	7,050,438	18·8	763,800	2 0 10
1944-45 ... ..	544,364	1,756,674	3·2	547,770	1 0 1
1945-46 ... ..	617,070	9,996,765	16·2	1,325,010	2 2 11

Particulars of oaten hay are shown in Table 424.

A larger area (617,070 acres) was harvested for oats grain in 1945-46 than ever previously, but the area under oats for all purposes was 1,207 acres less than the record of 1,126,676 acres sown in 1942-43. Although extensive areas were fed-off in southern districts because of dry conditions, the season elsewhere was very favourable and the harvest of 9,996,765 bushels was the largest ever obtained in New South Wales.

The particulars of oats grown for grain, hay or green crops since 1935-36 are shown below:—

TABLE 418.—Area and Purpose of Oats Crops, 1935-36 to 1945-46.

Year.	For Grain.	For Hay.	For Green Feed.	Total
	acres.	acres.	acres.	acres.
1935-36 ...	279,622	328,866	102,392	710,880
1936-37 ...	235,817	342,334	128,036	706,187
1937-38 ...	255,144	312,337	203,592	771,073
1938-39 ...	399,449	413,002	184,221	996,672
1939-40 ...	405,262	349,266	161,446	915,974
1940-41 ...	236,910	248,493	231,125	716,528
1941-42 ...	303,860	289,943	237,760	831,563
1942-43 ...	431,209	351,985	343,392	1,126,676
1943-44 ...	374,205	252,300	341,469	967,974
1944-45 ...	544,364	237,834	280,286	1,062,484
1945-46 ...	617,070	289,720	218,679	1,125,469

Subsidies provided by the Commonwealth for artificial manures and increasing attention given to the raising of fat lambs have been factors in the expansion of the cultivation of oats. Considerable areas of oats are grown as fodder for sheep, and with an improvement in quality as an outcome of plant breeding, grain is sold to local mills to be treated for human consumption.

The elevated districts of Monaro, Goulburn, Bathurst, and New England contain large areas of land on which oats could be cultivated with excellent results, as oats thrive best in regions which experience a winter of some severity. Particulars of the area cultivated and production in each of five divisions in which approximately 92 per cent. of the 1943-44, 80 per cent. of the 1944-45, and 90 per cent. of the 1945-46 oats crops were grown are given in the following table:—

TABLE 419.—Oats Production in Divisions, 1943-44 to 1945-46.

Division.	1943-44.			1944-45.			1945-46.		
	Area for Grain.	Production.		Area for Grain.	Production.		Area for Grain.	Production.	
		Total.	Per acre.		Total.	Per acre.		Total.	Per acre.
Riverina ...	acres. 120,178	bush. 2,201,004	bush. 18·3	acres. 177,836	bush. 285,633	bush. 1·6	acres. 169,554	bush. 2,076,462	bush. 12·2
S.W. Slopes ...	100,063	2,251,725	22·5	143,466	271,728	1·9	167,921	2,783,670	16·6
C.W. Slopes ...	66,776	1,162,986	17·4	112,246	374,049	3·3	121,400	2,450,895	20·2
Central Tablelands ...	29,901	587,082	19·6	34,456	175,701	5·1	47,747	972,291	20·4
N.W. Slopes ...	18,027	295,983	16·4	22,891	290,238	12·7	32,960	656,571	19·9

BARLEY.

Barley is produced only on a moderate scale in New South Wales, and supplies for local consumption are imported from other States. Although there are several districts where the necessary conditions as to soil and drainage are suitable for the crop, particularly the malting varieties, barley is grown mainly in the Western Slopes Division and in the Riverina. The areas under crop in other districts are small.

Only a small proportion of the barley required for malting is produced in New South Wales, but in co-operation with the brewers a system of seed barley production was inaugurated in 1935-36 and the production of malting barley increased.

The following table shows the area under barley for grain, together with the production at intervals since 1900-01.

TABLE 420.—Barley (Grain)—Area and Production, 1900-01 to 1945-46.

Season.	Area under Barley for Grain.	Production.		Season.	Area under Barley for Grain.	Production.	
		Total.	Average per Acre.			Total.	Average per Acre.
	acres.	bushels.	bushels.		acres.	bushels.	bushels.
1900-01 ...	9,435	114,228	12.1	1938-39...	14,194	217,680	15.3
1910-11 ..	7,082	82,005	11.6	1939-40...	24,273	465,810	19.2
1915-16 ...	6,369	114,846	18.0	1940-41...	20,087	175,674	8.7
1920-21 ...	5,969	123,290	20.7	1941-42...	20,581	303,594	14.8
1925-26 ...	6,614	105,150	15.9	1942-43...	14,297	223,236	15.6
1930-31 ...	11,526	188,610	16.4	1943-44...	20,075	379,656	18.9
1935-36 ...	11,583	214,860	18.5	1944-45...	28,119	121,716	4.3
1937-38 ...	11,542	166,860	14.4	1945-46...	28,893	495,936	17.2

Barley growing for grain expanded considerably during the war years, the average area sown increasing from 11,761 acres in the five seasons ended 1938-39 to 22,393 acres in the seasons 1941-42 to 1945-46. In 1945-46, when the season was generally favourable, both the area sown for grain (28,893 acres) and the harvest of barley (495,936 bushels) were the largest on record.

Particulars of areas sown with barley which yielded grain, hay and green fodder and of production in 1938-39 and each of the seasons since 1941-42 are shown below:—

TABLE 421.—Barley-Grain, Hay and Green Fodder, 1938-39 to 1945-46.

Season.	Area.					Production.		
	Malting Barley.	Other Barley.	Hay.	Green Food.	Total Area.	Malting Barley.	Other Barley.	Hay.
	acres.	acres.	acres.	acres.	acres.	bushels.	bushels.	tons.
1938-39 ...	6,961	7,233	2,225	7,737	24,156	111,780	105,900	2,238
1941-42 ...	10,403	10,178	1,513	8,149	30,243	149,760	153,834	1,174
1942-43 ...	5,501	8,796	4,800	18,863	37,960	79,667	143,559	5,776
1943-44 ...	10,154	9,921	1,340	11,876	33,291	205,449	174,207	1,376
1944-45 ...	17,567	10,552	1,474	13,529	43,122	79,161	42,555	889
1945-46 ...	18,624	10,269	1,088	11,787	41,768	339,264	156,672	1,342

*Australian Barley Board.*

In view of the difficulties of marketing under war-time conditions, regulations were issued under the National Security Act in September, 1939, to authorise the Commonwealth Government to acquire the barley harvested in Australia in the seasons 1939-40 to 1941-42 inclusive. The Australian Barley Board and State advisory committees were appointed to handle and market it. Growers were required to deliver their barley to licensed receivers and prices for local sales were fixed by the Board. The barley crops of Victoria and South Australia only were acquired for marketing by the Board in 1942-43 and later years.

## RICE.

The cultivation of rice in New South Wales expanded very rapidly after 1922 when encouraging results were obtained from trials on the Murrumbidgee Irrigation Area. As production increased beyond the demand for consumption in Australia a maximum area which might be supplied with water for irrigation of rice was fixed for each grower. To meet war-time demand the area per grower was increased and rice growing was extended beyond the Murrumbidgee Irrigation Area to the Tabbita and Benerembah Irrigation Districts supplied with water from the Murrumbidgee River and in 1943-44 to the Wakool Irrigation Area, supplied from the Murray River. These irrigation areas are the only localities in Australia where rice has been grown extensively.

The progress of rice growing since 1925-26 is illustrated below:—

TABLE 422.—Rice-Growing, 1925-26 to 1945-46.

Season.	Number of Holdings where Rice was Grown.	Area Harvested.	Yield (Paddy Rice).	Farm Value of Yield.	Average per acre.	
					Yield (Paddy).	Farm Value.
		acres.	bus.*	£	bus.	£
1925-26	30	1,556	61,100	12,030	39.21	7.7
1930-31	270	19,825	1,427,413	259,610	72.00	13.1
1935-36	304	21,705	2,163,520	354,620	99.68	16.3
1936-37	320	23,357	2,276,530	379,720	97.47	16.3
1937-38	319	23,737	2,268,907	380,220	95.59	16.0
1938-39	313	23,533	2,774,987	444,430	117.96	18.9
1939-40	314	24,120	1,857,650	333,360	77.00	13.8
1940-41	329	24,547	2,240,267	391,690	91.26	15.9
1941-42	331	23,633	2,192,052	425,220	92.75	18.0
1942-43	348	34,232	3,084,480	640,990	90.11	18.7
1943-44	364	40,690	4,014,933	826,820	98.67	20.3
1944-45	330	24,596	1,692,747	349,790	68.82	14.2
1945-46	329	28,372	2,735,040	565,600	96.4	20.0

\* 42 lb. per bushel.

The area harvested and the production of rice attained a record in 1943-44. The area included 36,400 acres in the Murrumbidgee districts and 4,200 acres at Wakool. In 1944-45, only 19,793 acres were sown in the Murrumbidgee districts, where each grower was allocated a maximum rice area of 60 acres owing to water shortage, but at Wakool the area increased to 4,803 acres. The season was very adverse and with low yields per acre the harvest was less than one-half that of 1943-44. Good results were

obtained in 1945-46 when 28,372 acres, including 4,100 acres in the Wakool district, were harvested. No rice was planted at Wakool in 1946-47.

Rice is marketed by a Rice Marketing Board constituted under the Marketing of Primary Products Act, and normally the greater part of the crop is sold for consumption in Australia. The price per ton, f.o.r. Leeton, was £11 in 1941 and £11 17s. in 1942-43 to 1945-46 inclusive.

The distribution of rice for consumption by civilians in Australia was suspended in August, 1942, and available supplies have been used mainly for Australian and Allied Services, for Asiatics in Australia and the population of Pacific Islands.

The quantity of marketable rice (paddy) produced, excluding grain retained for seed on the farms, and the amount and value of local rice shipped overseas from Australia in each year since 1933-34 are shown in the following statement:—

TABLE 423.—Rice Exported Overseas, 1933-34 to 1945-46.

Year ended 30th June.			Marketable Rice Produced in N.S.W. (Paddy).	Local Rice Exported Oversea from Australia.			
				Quantity.			Total Value.
				Cleaned.	Uncleaned.	Meal and Flour.	
			tons (2,240 lb.).				£
1934	...	...	39,938	8,537	334	209	127,470
1935	...	...	34,914	9,749	1,278	176	149,502
1936	...	...	39,180	8,754	438	392	150,904
1937	...	...	42,020	13,632	95	934	207,217
1938	...	...	42,113	12,217	126	412	215,353
1939	...	...	51,517	11,832	151	835	185,260
1940	...	...	34,251	14,060	114	403	268,032
1941	...	...	41,547	9,246	232	274	198,826
1942	...	...	41,147	11,038	244	1,095	224,674
1943	...	...	57,148	9,348	1,656	352	265,696
1944	...	...	75,060	23,712	11,573	358	591,326
1945	...	...	31,323	8,429	11,716	482	509,490
1946	...	...	50,793	9,932	15,355	148	590,897

A rice research station is maintained by the Department of Agriculture at Yanco, where plant breeding, seed selection and general experimental work are undertaken.

#### HAY.

The production of wheaten and oaten hay varies in accordance with the seasonal factors controlling yield, the prospects for grain crops and the market demand for hay. In favourable years considerable stocks are stacked for use in dry seasons. The production of lucerne hay, though subject to considerable fluctuation, is less variable than that of wheaten and oaten

hay. The following table shows the area, production and average yield per acre of hay of each principal kind since 1935-36:—

TABLE 424.—Hay—Area and Production.

Kind of Hay.	Annual Average 1936-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Wheaten—							
Area ... acres	338,100	354,833	346,261	287,470	198,066	279,120	389,918
Production tons	390,732	271,195	315,393	373,202	249,905	182,760	499,432
Yield p.a. ... tons	1.16	0.76	0.91	1.30	1.26	0.65	1.28
Oaten—							
Area ... acres	349,161	248,493	289,943	351,985	252,300	237,834	289,720
Production tons	399,040	177,070	283,978	448,368	329,905	87,836	352,976
Yield p.a. ... tons	1.14	0.71	0.98	1.27	1.31	0.37	1.22
Lucerne—							
Area ... acres	98,762	109,164	75,855	91,671	82,179	66,820	69,745
Production tons	153,017	166,660	113,914	158,109	153,574	99,173	126,016
Yield p.a. ... tons	1.55	1.53	1.50	1.72	1.87	1.48	1.81
Barley and Rye—							
Area ... acres	2,342	3,135	2,083	5,031	1,925	2,055	1,331
Production tons	2,638	2,339	1,720	6,064	2,257	1,384	1,588
Yield p.a. ... tons	1.13	0.74	0.82	1.21	1.17	0.67	1.19
Total Hay—							
Area ... acres	788,365	715,625	714,142	736,157	534,470	585,829	750,714
Production tons	945,427	617,264	715,005	985,743	735,641	371,153	980,012
Yield p.a. ... tons	1.20	0.86	1.00	1.34	1.38	0.42	1.31

The production of hay was exceptionally poor in 1944-45, but in 1945-46 was approximately 20 per cent. greater than the annual average of the preceding ten years.

The quantity of grass cut for hay was ascertained for the first time in 1945-46. Farmers' returns indicated the quantity cut as 10,785 tons from 7,686 acres; an average yield of 1.4 tons per acre. Grass hay is not included in the figures in the above table.

Information regarding the storage of hay on the rural holdings is shown on page 401 in the chapter "Rural Industries".

#### SUGAR-CANE.

The great bulk of the Australian sugar-cane is grown in Queensland, but its cultivation is an important enterprise on the far north coast of New South Wales. The cane-fields are confined to the hills and flats of the Tweed and the flats of the Clarence and Richmond Rivers, where the conditions are favourable, *e.g.*, cheap transport (important because of the bulky nature of the crop), suitable soil, good drainage, adequate rainfall and reasonable freedom from frost. There are few holdings devoted exclusively to cane-growing; usually it is undertaken in association with other agricultural activities and dairying.

The planting of sugar-cane takes place usually from August to early November according to location, soil and climatic conditions. Usually plantings are renewed every fourth or fifth year. Harvesting is a standardised process carried out on a contract basis. The cut cane is crushed in three mills at convenient centres and the raw sugar is purchased by

the Queensland Sugar Board in terms of an agreement with the Commonwealth Government. Certain particulars regarding the operations of these sugar mills and the sugar refinery at Pymont (Sydney) are published in the chapter "Factories".

The average yield of cane per acre varies considerably from year to year; it depends partly upon seasonal conditions, cultural methods, and variety of cane and specially upon the maturity of the cane—sometimes considerable areas are stood over for harvesting in the following year. The highest yield on record was 42½ tons per acre in 1941-42.

For several years before the war the area under sugar-cane exceeded 20,000 acres, but it decreased progressively to 13,473 acres—the smallest since 1922—in 1944-45, and in 1945-46 was 14,803 acres. In the season 1945-46 cane was cut for crushing from 5,943 acres and 8,860 acres remained uncut. Beside the general war-time decrease in cane-growing, dry weather retarded early development, floods later damaged the crop and labour shortages affected harvesting. In consequence the quantity of cane cut (166,096 tons) was less than in any season since 1932-33, and 51 per cent. less than in 1938-39.

The fluctuations of cane-growing in New South Wales are shown in the following table:—

TABLE 435.—Sugar-cane—Area and Production, 1905-06 to 1945-46.

Season.	Area under Sugar-cane.			Production of Sugar-cane.		Value of Sugar-cane Produced.†	
	Cut for Crushing.	Not Cut.	Total.*	Quantity.	Average Per Acre.	Total.	Per Acre.
	acres.	acres.	acres.	tons.	tons.	£	£ s. d.
1905-06 ...	10,313	11,492	21,805	201,988	19.59	161,240	15 12 8
1915-16 ...	6,030	5,228	11,258	157,748	26.16	205,070	34 0 2
1925-26 ...	8,688	10,675	19,363	297,335	34.22	397,690	45 15 6
1930-31 ...	7,617	8,007	15,624	160,209	21.03	279,700	36 14 5
1935-36 ...	10,416	9,794	20,210	280,472	26.93	384,820	36 18 11
1937-38 ...	10,716	10,137	20,853	361,724	33.76	489,240	45 13 1
1938-39 ...	10,458	10,772	21,230	336,701	32.20	482,520	46 2 6
1939-40 ...	10,488	10,229	20,717	274,584	26.20	447,830	42 14 0
1940-41 ...	10,192	10,386	20,578	342,548	33.61	507,260	49 15 5
1941-42 ...	8,491	9,896	18,387	359,433	42.33	514,910	60 12 10
1942-43 ...	9,732	8,958	18,690	338,013	34.73	490,890	50 8 10
1943-44 ...	8,240	7,092	15,332	290,364	35.24	458,900	55 13 10
1944-45 ...	6,771	6,702	13,473	200,050	29.54	350,550	51 15 5
1945-46 ...	5,943	8,860	14,803	166,069	27.94	292,640	49 4 9

\* Exclusive of areas cut for green food or plants since 1910. † At place of production.

### *Sugar Agreement.*

Since June, 1920, the sugar industry in Australia has been subject to agreements between the Commonwealth and Queensland Governments administered by the Queensland Sugar Board, which arranges for the refining and marketing of sugar produced in Queensland and New South Wales. There is an embargo on the importation of foreign sugar and the prices of refined sugar of various grades are fixed on a uniform basis throughout Australia. Under the current agreement (operative to 31st August, 1951) the wholesale price of refined sugar of 1A grade is £33 4s. per ton. The sugar is sold retail on the basis of 4½d. per lb. (4d. per lb. prior to October, 1947) in capital cities.

Provision is made for rebates on sugar used in the manufacture of canned fruits, jams, etc., and on the sugar contents of other manufactures exported to reduce the cost of the sugar used to a parity with world prices of sugar. These rebates are made at rates and on conditions determined by the Fruit Industry Sugar Concession Committee (see page 481) and the Export Sugar Committee set up under the agreement.

Supplies of sugar for household consumption were rationed by means of coupons from 31st August, 1942, to 2nd July, 1947, at the rate of 1 lb. per head per week, but additional supplies were made available from time to time for domestic jam making.

#### TOBACCO.

Encouragement has been given for many years by the Commonwealth and State Governments to tobacco growing, but in New South Wales the industry, though potentially important, has not developed. In 1945-46 there were only 20 growers and even at the peak in the years 1931-32 to 1935-36 the average number of holdings on which tobacco was grown was only 180; the area planted averaged 1,931 acres, and the annual production of dried leaf was 12,041 cwt. In 1945-46 the area planted was 370 acres and 3,263 cwt. of dried leaf was produced. There is a State Tobacco Expert to advise farmers and to conduct field experiments; assistance has been given by scientific investigations financed from Commonwealth and State funds; the industry has a highly protective tariff, and on occasion (as in 1943-44 and 1944-45) it has been aided by subsidy. Researches of the Council for Scientific and Industrial Research produced effective means to combat blue mould, which earlier had jeopardised the progress of the industry.

Since May, 1941 (and until 31st December, 1947), all leaf grown in Australia has been or is to be appraised, acquired and marketed by the Australian Tobacco Board under National Security Regulations.

Tobacco leaf is grown mainly in the North-western Slopes division on light, sandy land with facilities for irrigation. The experience in the cultivation of tobacco in New South Wales since 1916-17 is illustrated by the following table:—

TABLE 426.—Tobacco-growing—Area and Production, 1916-17 to 1945-46.

Season.	Holdings Cultivating Tobacco.	Area Planted.	Production (Dried Leaf).	Production per acre Cultivated.	Value of Production (At Farm).	Average Value per acre Cultivated.
	No.	acres.	cwt.	cwt.	£	£ s.
Average 1917-21	105*	1,009	10,293	10-20	79,632	78 18
„ 1922-26	135	1,493	12,234	8-19	95,890	64 6
„ 1927-31	87	688	4,310	6-26	38,128	55 8
„ 1932-36	180	1,931	12,041	6-24	149,414	77 5
„ 1937-41	52	759	5,175	6-82	49,508	65 5
1937-38 ...	58	610	3,649	5-98	37,860	62 1
1938-39 ...	41	629	3,550	5-64	38,220	60 15
1939-40 ...	37	717	4,674	6-52	40,050	55 17
1940-41 ...	49	988	8,589	8-69	77,590	78 11
1941-42 ...	52	953	7,461	7-83	72,530	76 2
1942-43 ...	57	823	6,892	8-36	71,790	87 5
1943-44 ...	39	657	4,599	7-00	61,530	93 13
1944-45 ...	26	410	3,107	7-58	41,210	100 10
1945-46 ...	20	370	3,263	8-82	47,200	127 11

\* Average for four years—particulars for 1919-20 not available.



GRAPES.

The most important viticultural district is in the Riverina Division, where 5,080 acres under vines in 1945-46 were for wine-making, 726 acres for table use, 1,498 acres for drying, with 298 acres of young vines. The greater part of these vineyards is in the Murrumbidgee Irrigation Area. The growing of grapes for drying is most extensive in the irrigation areas at Wentworth, where 3,156 acres of vines were devoted to this purpose and 14 acres to other purposes in 1945-46.

In the Hunter and Manning Division the area cultivated for grapes in 1945-46 was 1,178 acres for wine-making, 245 acres for table use, and 253 acres of young vines.

A comparative statement of the area planted with table, drying and wine grapes is shown below:—

TABLE 427.—Grapes—Area Grown for Various Purposes, 1938-39 to 1945-46.

Varieties of Grapes.				1938-39.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46
				acres.	acres.	acres.	acres.	acres.	acres.	acres.
Table ...	...	...	...	3,178	3,014	2,905	2,948	2,917	2,906	2,735
Drying...	...	...	...	5,011	5,368	5,433	5,367	5,376	5,377	5,320
Wine ...	...	...	...	7,499	7,371	7,371	7,058	7,054	6,847	6,876
Total, bearing	...	...	...	15,688	15,753	15,709	15,373	15,347	15,130	14,931
Not bearing ...	{	Wine ...	...	647	292	306	293	175	266	432
		Other...	...	644	433	430	636	479	495	620
Grand Total	...	...	...	16,979	16,478	16,445	16,302	16,001	15,891	15,983

The production of the vineyards according to the purposes for which it was used is shown in the following comparison. The produce of some varieties of vines cultivated usually for a particular purpose may be used ultimately in a different way. The quantities stated below, therefore, do not relate in every case to the acreages as classified in the preceding table.

Particulars regarding the varieties of dried grapes—currants, sultanas and lexias—are shown in Table 440.

TABLE 428—Grapes—Production, 1938-39 to 1945-46.

Production.		1938-39.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Table grapes ...	tons	4,034	4,860	4,573	5,186	5,325	4,363	4,817
Dried grapes ...	...	6,076	7,970	9,401	8,888	9,207	6,116	7,781
Grapes used for wine...	...	16,613	23,062	21,683	17,681	20,627	15,778	18,473
Wine made ...	gal.	2,501,747	3,220,234	3,112,328	2,720,934	3,530,012	2,578,732	2,967,648

Seasonal conditions affect average yields greatly. The most critical periods are during the budding and early growing season (September and October) and in February and March, when ripening and picking are in progress and drying is commenced.

The quantity of wine made in 1943-44 was the largest on record and the annual output in the five seasons ended 1945-46 was 21 per cent. greater than in the five years ended 1938-39.

Particulars of the production from vineyards in irrigation areas are shown in the chapter "Water Conservation and Irrigation" (see page 495).

A Wine Grapes Marketing Board, constituted under the Marketing of Primary Products Act of New South Wales, functions mainly as a negotiating body between the growers of the Murrumbidgee Irrigation Area and the winemakers.

The export trade in wine is assisted by Commonwealth bounty payable under the Wine Export Bounty Act, 1939-40. Bounty is paid on exports of fortified wine produced from grapes grown on areas planted with vines before April, 1928 or from areas planted on an irrigation area before June, 1930, with State assistance, provided (a) the grapes and fortified spirit used are bought at not less than the minimum prices fixed by the Minister, and (b) that prescribed conditions of employment are observed in all stages of grape and wine production. The rate of bounty from 1st March, 1939, to 23rd February, 1947, was 1s. per gallon; the amount of bounty paid in New South Wales was £2,427 in 1943-44, £1,597 in 1944-45 and £1,573 in 1945-46.

Under the Wine Overseas Marketing Act, 1929-45 the Australian Wine Board (consisting of representatives of the Commonwealth Government, grape growers, co-operative wineries and distilleries and privately-owned distilleries) supervises the export trade, maintains a representative in London, has all wine inspected before export, and arranges advertising and œnological research. To meet its expenses a levy is imposed on grapes used in Australia for making wine or spirit used for fortifying wine. The rate of the levy in 1944-45 and 1945-46 was 2s. per ton of fresh grapes and 6d. per ton of dried grapes.

#### FRUIT GROWING.

The area of fruit crops of all kinds (including grapes) on holdings of one acre or more in 1945-46 was 100,045 acres, viz., productive 83,700 acres and not yet bearing 16,345 acres. Particulars of area and value of the crops in last four seasons are shown below:—

TABLE 429.—Fruit—Acreage and Value of Production, 1942-43 to 1945-46.

Fruit Crops.	Area of Crops.*				Farm Value of Crops.			
	1942-43.	1943-44.	1944-45.	1945-46.	1942-43.	1943-44.	1944-45.	1945-46.
	acres.	acres.	acres.	acres.	£	£	£	£
Orchards—								
Citrus ...	30,043	29,086	28,411	28,502	1,464,610	2,023,610	1,832,920	1,671,510
Other ...	35,732	38,326	37,549	37,270	1,728,510	2,556,130	1,607,730	2,530,880
Vineyards ...	16,302	16,001	15,891	15,983	770,990	896,280	720,490	807,600
Bananas ...	12,457	12,868	15,250	16,938	1,162,070	1,712,160	1,758,790	2,006,330
Other ...	1,131	1,003	1,020	1,352	66,790	72,050	48,770	69,800
Total ...	95,665	97,284	98,121	100,045	5,182,970	7,260,230	5,968,700	7,085,920

\* Includes passion fruit, pineapples, berry fruits, etc.

The cultivation of many classes of fruit is capable of considerable expansion, and there are large areas of suitable soil with climatic conditions ranging from comparative cold on the highlands to semi-tropical heat on the North Coast, so that a large variety of fruits can be cultivated. In the vicinity of Sydney, citrus fruits, peaches, plums, apples, and passion-fruit are most generally planted. On the tablelands, apples, pears, apricots and all the fruits from cool and temperate climates thrive; in the west and in the south-west, citrus, pome and stone fruits, figs, almonds and grapes are cultivated; and in the north coastal districts, bananas, pineapples and other tropical fruits are grown.

The usual periods of harvesting are in the summer and early autumn. Bananas and citrus fruits are harvested throughout the year. Apples and pears ripen from December to May, peaches and plums from November to March, apricots from November to February and table grapes from January to April.

Information regarding the marketing of fruit in New South Wales is given at the conclusion of this chapter.

Particulars as to the number of fruit trees on rural holdings of one acre or over in 1930-31, 1938-39 and 1945-46 and the yield in 1945-46 are shown below. Bananas, passion fruit, pineapples, grapes and berry fruits are not included:—

TABLE 430.—Fruit Trees 1930-31 to 1945-46 and Production 1945-46.

Fruit.	1930-31.		1938-39.		1945-46.		
	Number of Trees.				Number of Trees not yet Bearing.	Trees of Bearing Age.	
	Not yet Bearing.	Bearing.	Not yet Bearing.	Bearing.		Number.	Yield.
Oranges—							
Navel ... ..	158,380	551,616	114,546	643,736	114,262	662,059	bushels. 872,403
Valencia ... ..	234,560	719,441	154,055	802,254	234,812	887,188	982,164
All other ... ..	39,081	425,123	20,971	185,747	16,476	118,747	114,178
Total oranges ... ..	432,021	1,696,180	289,572	1,631,737	365,550	1,667,994	1,968,746
Lemons ... ..	53,350	210,833	65,352	207,464	58,851	258,585	332,450
Mandarins ... ..	100,184	589,839	20,274	331,955	18,007	216,951	179,175
Other Citrus ... ..	14,919	27,942	19,012	39,628	25,045	65,507	125,434
Total Citrus ... ..	600,474	2,524,794	394,210	2,210,784	467,453	2,209,037	2,605,804
Apples ... ..	323,802	967,164	471,810	1,104,399	167,221	1,096,997	1,180,442
Pears ... ..	45,614	301,612	61,645	290,942	57,915	279,536	323,981
Peaches—							
Dessert ... ..	54,166	302,688	87,471	311,507	98,413	337,306	299,046
Canning ... ..	55,685	171,127	114,077	185,053	75,987	238,120	402,321
Nectarines ... ..	7,746	32,142	16,734	41,894	16,550	58,107	58,358
Plums ... ..	37,559	207,631	25,488	201,000	17,021	158,891	149,433
Prunes ... ..	21,616	272,553	14,111	248,567	36,413	208,938	220,803
Figs ... ..	6,002	8,629	3,331	20,106	2,838	17,742	14,865
Cherries ... ..	78,331	241,724	42,854	268,643	22,771	214,815	160,286
Apricots ... ..	16,156	147,789	21,743	146,969	28,167	137,716	233,107
Quinces ... ..	9,929	15,969	7,384	38,158	7,964	36,540	54,846
Almonds ... ..	9,031	35,898	25,402	53,688	8,127	53,743	3,851
All other ... ..	2,269	15,738	13,072	21,274	2,493	13,980	10,641
Total Non-Citrus	667,906	2,720,664	905,122	2,932,200	541,880	2,852,431	3,111,979

Before the war (1939-45) citrus fruit growing tended to decrease and non-citrus fruit growing to extend moderately. Part of an increase in citrus trees between 1938-39 and 1942-43 was lost in following years, but in 1945-46 these numbered about 71,000 (or 2.7 per cent.) more than in 1938-39. Non-citrus trees in bearing decreased between 1938-39 and 1945-46 by about 80,000 or 2.7 per cent., reflecting marked contraction in plantings; trees not yet in bearing in 1945-46 were fewer by 363,000 or 40.1 per cent. than in 1938-39.

Citrus Fruits.

Particulars of citrus orchards are shown in the following statement:—

TABLE 431.—Citrus Fruits—Area and Production, 1910-11 to 1945-46.

Season.	Area under Cultivation (Citrus Fruits.)			Production.		Farm Value of Production.	
	Productive.	Not bearing.	Total.	Total.	Average per Productive Acre.	Total.	Average per Productive Acre.
	acres.	acres.	acres.	bushels.	bushels.	£	£ s. d.
1910-11	17,465	2,643	20,108	1,478,306	85	199,300	11 8 3
1920-21	21,990	6,445	28,435	2,009,756	91	477,580	21 14 4
1922-26 (Av.)	21,854	8,119	29,973	2,155,313	99	595,900	27 5 4
1927-31	26,140	7,019	33,159	2,677,548	102	826,450	31 12 4
1932-36	26,223	4,806	31,029	2,947,468	112	557,850	21 5 0
1936-37	24,566	3,986	28,552	2,784,104	113	653,180	26 11 9
1937-38	23,875	3,742	27,617	2,653,599	111	659,950	27 12 6
1938-39	23,416	4,072	27,488	3,108,859	133	823,300	35 3 2
1939-40	23,077	4,313	27,390	2,405,785	104	886,770	38 8 6
1940-41	22,909	4,708	27,617	2,705,548	118	619,080	27 0 6
1941-42	22,502	5,081	27,583	2,833,548	126	1,157,120	51 8 6
1942-43	24,402	5,641	30,043	2,085,065	85	1,464,610	60 0 5
1943-44	23,726	5,360	29,086	2,891,648	122	2,023,610	85 5 10
1944-45	23,384	5,027	28,411	2,990,468	128	1,882,920	78 7 8
1945-46	23,484	5,018	28,502	2,605,804	111	1,671,510	71 3 6

Most of the citrus orchards are concentrated about Gosford, Windsor, Kurrajong, Baulkham Hills and Hornsby within about fifty miles of the metropolis (in the Hunter and Manning, Central Tablelands and Metropolitan divisions) and in the Murrumbidgee Irrigation Area in the Riverina division. Of 28,502 acres under citrus fruits in 1945-46, approximately 19,000 acres were in the divisions first named and about 7,000 acres were in the Murrumbidgee Irrigation Area.

Oranges predominate, with Valencias comprising more than one-half and navels over three-eighths of the orange trees, and show little change in total number of productive age over the last ten years. During that period, however, lemon trees (bearing) increased by nearly 50,000 (23 per cent.) and mandarin trees (bearing) decreased owing to marketing difficulties by about 170,000 (44 per cent.).

Seasonal conditions cause rather marked fluctuations in production; these were adverse in all districts in 1945-46 when the fruit produced (2,605,804 bushels) was 391,000 bushels less than in 1944-45 and 503,000 bushels or 16.2 per cent. less than the record yield of 3,109,000 bushels in 1938-39.

Particulars of the production of the various kinds of citrus fruits in each year 1936-37 to 1945-46 are shown below; information as to the number of trees in 1942-43 is not available:—

TABLE 432.—Citrus Fruits—Trees and Production, 1936-37 to 1945-46.

Year ended March.	Oranges.				Lemons.	Mandarins.	Other Citrus.	Total.
	Navel.	Valencia.	Other	Total Oranges.				
Trees of Productive Age—Thousands.								
1937 ...	632.7	811.2	229.4	1,673.3	209.9	386.9	35.4	2,305.5
1938 ...	633.5	812.0	203.3	1,648.8	210.1	370.3	37.0	2,266.2
1939 ...	643.7	802.3	185.7	1,631.7	207.5	332.0	39.6	2,210.8
1940 ...	654.0	798.9	180.0	1,627.9	208.8	307.9	37.6	2,182.2
1941 ...	643.3	790.8	173.9	1,608.0	215.1	294.3	39.2	2,156.6
1942 ...	648.0	798.9	129.9	1,576.8	232.9	270.3	57.7	2,137.7
1944 ...	651.6	831.0	139.2	1,621.8	240.0	241.9	56.9	2,160.6
1945 ...	657.3	857.3	125.6	1,640.2	252.5	230.5	63.9	2,187.1
1946 ...	662.1	887.2	118.7	1,668.0	258.5	217.0	65.5	2,209.0

TABLE 432.—*Citrus Fruits—Trees and Production, 1936-37 to 1945-46—continued.*

Year ended March.	Oranges.				Lemons.	Mandarins	Other Citrus.	Total.
	Navel.	Valencia.	Other	Total Oranges.				
Production—Thousand bushels.								
1937 ...	898.3	1,028.8	243.9	2,171.0	244.9	320.3	47.9	2,784.1
1938 ...	879.9	922.7	219.2	2,021.8	253.0	314.4	64.4	2,653.6
1939 ...	1,078.3	1,172.6	227.2	2,478.1	256.5	305.8	68.5	3,108.9
1940 ...	895.4	874.9	174.8	1,945.1	211.6	186.6	62.5	2,405.8
1941 ...	1,014.9	1,067.5	157.5	2,239.9	235.5	153.8	76.4	2,705.6
1942 ...	985.3	1,066.9	169.8	2,222.0	287.3	236.1	88.4	2,833.8
1943 ...	788.8	752.8	103.8	1,645.4	227.7	127.6	89.3	2,085.0
1944 ...	997.5	1,093.0	160.8	2,251.3	298.0	231.1	111.2	2,891.6
1945 ...	995.4	1,190.5	160.4	2,346.3	334.0	193.4	122.8	2,996.5
1946 ...	872.4	982.2	114.1	1,968.7	332.5	179.2	125.4	2,605.8

*Fruits other than Citrus.*

The non-citrus orchards are distributed widely throughout the State. The following table shows the area of non-citrus orchards and fruit gardens, including passion fruit but exclusive of bananas, pineapples and berry fruits, together with the total value of each season's yield, at intervals since 1910-11:—

TABLE 433.—Non-Citrus Fruits—Area and Value—1910-11 to 1945-46.

Season.	Area under Cultivation (Fruits other than Citrus).			Farm Value of Production.	
	Productive.	Not Bearing.	Total.	Total.	Average per Productive Acre.
	acres.	acres.	acres.	£	£ s. d.
1910-11 ...	20,498	6,748	27,246	271,930	13 5 4
1920-21 ...	27,302	14,309	41,611	577,480	21 3 0
1932-36 (Av.) ...	32,834	7,713	40,547	719,846	21 18 6
1936-37* ...	35,211	10,201	45,412	1,030,270	29 5 2
1937-38 ...	34,462	10,254	44,716	935,474	27 2 11
1938-39 ...	34,037	9,955	43,992	899,120	26 8 4
1939-40 ...	33,003	10,012	43,015	869,140	26 6 8
1940-41 ...	32,923	9,364	42,287	930,210	28 5 1
1941-42 ...	33,281	8,476	41,757	1,154,900	34 14 0
1942-43 ...	29,732	6,866	36,598	1,771,900	59 11 11
1943-44 ...	32,540	6,470	39,010	2,609,390	80 3 10
1944-45 ...	31,826	6,300	38,126	1,645,350	51 14 0
1945-46 ...	31,474	5,796	37,270	2,592,780	82 7 7

\* The increase in 1936-37 was due to the inclusion of a number of small orchards not previously recorded.

More than one-quarter of the area under fruits other than citrus is situated in the Central Tablelands, where the area occupied in this way in 1945-46 was 10,002 acres; 7,105 acres were situated in the South-Western Slopes and 8,334 acres in the Riverina. The last-mentioned acreage includes the orchards of the Murrumbidgee Irrigation Area, which are described in the chapter "Water Conservation and Irrigation".

Apples easily take first place amongst non-citrus fruits and, with pears, are grown extensively around Bathurst and Orange (Central Tablelands), Batlow and Tumbarumba (South-Western Slopes), Uralla (Northern Tablelands), between Camden and Mittagong (South Coast) and in the Murrumbidgee Irrigation Area (Riverina division).

Over the last ten years the number of apple trees in bearing has remained fairly constant; and peach growing has expanded, especially for canning; but the number of apricot, plum, prune and cherry trees has decreased considerably.

The number of non-citrus fruit trees (in bearing) of each of the principal varieties and production in each year since 1936-37 are shown in the following table. (Particulars as to the number of trees were not collected in 1942-43).

TABLE 434.—Non-Citrus Fruits—Trees and Production, 1936-37 to 1945-46.

Season.	Apples.	Pears.	Peaches.	Apricots.	Plums.	Prunes.	Cherries.
Number of Trees of Productive Age.							
1936-37 ...	1,121,395	293,808	498,758	155,454	218,410	242,482	276,194
1937-38 ...	1,133,609	293,666	498,393	152,843	211,180	236,961	272,410
1938-39 ...	1,104,399	290,942	496,560	146,969	201,000	248,567	268,643
1939-40 ...	1,074,570	281,019	481,414	142,288	190,388	219,572	266,061
1940-41 ...	1,078,595	275,116	491,438	136,779	184,214	209,650	259,194
1941-42 ...	1,071,775	272,999	545,168	147,541	189,734	210,863	249,325
1943-44 ...	1,110,447	254,806	567,320	139,757	185,183	207,812	219,197
1944-45 ...	1,088,162	281,173	566,291	140,251	167,032	207,056	212,779
1945-46 ...	1,096,997	279,536	575,426	137,716	158,891	208,938	214,815
Production—Bushels.							
1936-37 ...	1,410,685	399,046	568,159	127,672	137,541	274,669	132,139
1937-38 ...	1,234,802	455,610	509,532	197,846	145,917	307,632	140,493
1938-39 ...	936,766	338,467	583,833	153,685	114,140	146,409	127,459
1939-40 ...	615,932	276,257	508,409	194,994	100,960	206,157	69,225
1940-41 ...	989,679	364,829	583,064	164,866	117,545	164,339	115,668
1941-42 ...	812,843	257,433	584,831	197,184	93,118	176,826	132,872
1942-43 ...	628,418	353,863	631,239	234,441	173,831	210,280	137,116
1943-44 ...	1,233,758	319,976	752,357	246,008	243,166	243,688	213,229
1944-45 ...	501,378	270,609	501,059	99,968	121,982	119,389	146,460
1945-46 ...	1,180,442	323,981	701,367	233,107	149,433	220,803	160,286

Vagaries of season, pests and disease affect the yield of non-citrus fruits greatly. Thus, in 1944-45, production was 1,837,917 bushels following upon 3,396,087 bushels in 1943-44, and succeeded by 3,111,979 bushels in 1945-46.

### *Bananas.*

Practically all banana growing is in the North Coast division where it is extensive in the Tweed River district, and of some importance around Coff's Harbour, where it developed during the depression years. More prosperous conditions and a recurrence of bunchy-top caused a decrease in holdings with an acre or more of bananas from 2,295 in 1933-34 to 1,228 in 1942-43. Then the industry expanded again and in 1945-46 the number of holdings was 1,964.

The acreage of bananas was greatest (17,438 acres) in 1933-34, but two years later was 4,409 acres smaller. Subsequent fluctuations brought it to 15,264 acres in 1940-41, 12,547 acres in 1942-43 and 16,938 acres in 1945-46, when both bearing and not-yet-bearing acreages were increasing.

More than 1,500,000 bushels of bananas were produced in every season since 1934-35 and production in 1945-46, 1,960,381 bushels, was a record.

Bananas consigned to southern markets are handled by the Banana Growers' Federation, a growers' co-operative organisation. Since late in 1946, bananas have been marketed in cases of a capacity of approximately 1.36 bushels in lieu of tropical cases containing about 1.6 bushels.

The following table shows the area cultivated for and the production of bananas in certain years since 1922:—

TABLE 435.—Banana-growing, 1921-22 to 1945-46.

Year ended 31st March.	Holdings.	Area.			Production.	
		Bearing.	Not bearing.	Total.	Bushels.	Farm Value.
		acres.	acres.	acres.	No.	£
1922* ... ..		4,570	898	5,468	650,299	260,120
1925* ... ..		1,002	502	1,504	91,144	47,090
1930* ... ..	523	1,806	1,534	3,340	175,680	107,840
1935 ... ..	2,117	12,179	3,893	16,072	1,589,064	306,220
1936 ... ..	1,745	11,856	1,173	13,029	1,609,787	331,180
1937 ... ..	1,750	11,560	2,013	13,573	1,615,402	563,700
1938 ... ..	1,697	11,965	2,749	14,714	1,845,394	740,080
1939 ... ..	1,501	11,677	2,194	13,871	1,582,706	585,270
1940 ... ..	1,509	11,838	2,618	14,456	1,700,648†	611,170†
1941 ... ..	1,565	12,706	2,558	15,264	1,905,310	575,560
1942 ... ..	1,344	12,930	932	13,862	†	730,370§
1943 ... ..	1,228	11,700	757	12,457	†	1,162,070§
1944 ... ..	1,395	11,651	1,217	12,868	1,580,462†	1,712,160†
1945 ... ..	1,747	11,967	3,283	15,250	1,600,422†	1,758,790†
1946 ... ..	1,964	13,145	3,793	16,938	1,960,381†	2,006,330†

\* Year ended 30th June.

† Revised.

‡ Not available.

§ Subject to revision.

### *Fruit and Vegetable Canning.*

Under the Sugar Agreement between the Commonwealth and Queensland Government (see page 473), the Queensland Sugar Board for the Queensland Government provides from proceeds of the sale of cane sugar the amount of £216,000 annually for disbursement by the Fruit Industry Sugar Concession Committee (constituted under the Agreement) in the form of rebates on sugar used in the manufacture of fruit products. The Committee comprises representatives of the Commonwealth Government, the Queensland Sugar Board and of growers and processors of fruit.

A domestic sugar rebate of £2 4s. per ton is paid to manufacturers on sugar used in manufacturing fruit products, provided the fruit processed is bought at not less than prices determined by the Committee. When the Australian exceeds the world parity price of sugar, an export sugar rebate is made on the sugar contents of fruit products exported. Additionally, the Committee has provided special export assistance from time to time as indicated in the following pages.

The domestic sugar rebates granted in respect of New South Wales fruit products amounted to £41,738 in 1943-44, to £34,942 in 1944-45, and to £36,858 in 1945-46. Because of the high world prices, payments of export sugar rebate were negligible in 1944-45 and 1945-46. Any funds remaining after payment of rebates may be applied to promote the use of Australian fruit products in Australia or abroad, or for research for the purpose of increasing the yield per acre of fruits required by manufacturers.

The following statement shows the minimum prices declared by the Fruit Industry Sugar Concession Committee as reasonable prices to be paid by manufacturers for certain fresh fruits of the seasons 1939 to 1946. Canning prices are at grower's railway station or country cannery. Non-canning prices are for fruit delivered at metropolitan factory; if delivered at country factory the minimum prices are £1 per ton lower than those stated:—

TABLE 436.—Minimum Prices of Fresh Fruit for Manufacture.

Kind of Fruit.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.
	Prices per long ton (2,240 lb.).							
	£	£	£	£	£	£	£	£
Apricots—Canning ...	12	13	13	14	15½	16½	17	17
Non-Canning ...	10	11	11	12	13½	14½	15	15
Peaches, Canning—								
Clingstone, clear centres ...	9½	12	12	13	14½	15½	16	16
Clingstone, Other ...	8½	11	11	12	13½	14½	15	15
Freestone ...	7	9½	8½	9½	10½	12	12½	12½
Peaches, Non-Canning ...	6	9	8	9	10½	11½	12	12
Pears—Bartlett ...	10	12	11	12	13½	14½	15	15
Plums ...	6	8	8	8½	9	10	10	10
Quinces—Canning ...	6	8	8	8½	9	10	10	10
Non-Canning ...	...	7	7	7½	8	9	9	9

#### *Fruit Canning.*

The Australian Canned Fruits Board supervises the export of canned fruit under the Canned Fruits Export Control Act, 1926-38. Before the war exporters were assisted by an export bounty (additionally to domestic and export sugar rebates as previously described) paid by the Fruit Industry Sugar Concession Committee. The rates of bounty in 1938-39 per dozen 30 oz. cans were 1½d. for apricots and pears and 3d. for peaches. About 50 per cent. of the pre-war pack went to the United Kingdom and quantities were marketed in Canada, New Zealand and Eastern countries.

Export surpluses of the 1939-40 and 1940-41 packs were purchased by the United Kingdom Ministry of Food. The Commonwealth accepted responsibility for unsold canned fruit of the 1940-41 and 1941-42 packs and from 1942-43 supervised the disposal of canned fruits under National Security powers and allocated nearly all of it for service requirements, including Allied forces. Limited shipment to the United Kingdom began again in 1944-45, and the United Kingdom Ministry of Food purchased 977,300 cases, or about one-half the output of 1945-46. Simultaneously service demands contracted sharply, but even so, considerably less canned fruit reached local markets than before the war.

The production of canned fruit was heavy up to 1940-41, after which scarcity of factory and field labour and of tin-plate, the pulping of large quantities of fruit, and some adverse seasons caused marked reduction. In 1944-45 the output was 51.8 per cent. below the annual average in 1936-37 to 1938-39, and although the recovery in 1945-46 was substantial, the quantity canned in that season was 22 per cent. below the pre-war average.



The quantity and value of fruit preserved in liquid in factories in New South Wales in each year since 1936-37 were as shown below:—

TABLE 437.—Fruit Preserved in Liquid—1936-37 to 1945-46.

Year ended 30th June.	Fruit Preserved in Liquid.		Year ended 30th June.	Fruit Preserved in Liquid.	
	Quantity.	Value at Cannery.		Quantity.	Value at Cannery.
	lb.	£		lb.	£
1937 ... ..	28,394,451	438,172	1942 ... ..	23,309,653	587,772
1938 ... ..	26,947,628	465,968	1943 ... ..	17,351,194	460,588
1939 ... ..	28,387,122	507,032	1944 ... ..	19,181,992	498,400
1940 ... ..	24,182,682	517,299	1945 ... ..	13,456,695	387,216
1941 ... ..	29,581,313	617,370	1946 ... ..	21,762,420	581,618

*Jam.*

Jam-making absorbs a considerable proportion of the fruit produced, and special export assistance, supplementary to domestic and export sugar rebates, has been given jam manufacturers by the Fruit Industry Sugar Concession Committee. Between January, 1932 and December, 1941, all jam exported, other than to New Zealand, and after 1936, excepting certain varieties to the United Kingdom, was eligible for this assistance which was at the rate of £5 per ton up to 1939 and at £2 10s. per ton during 1940 and 1941. From 1942 onward demands of British and Allied services and Australian civilian requirements absorbed the entire output of jam. The export trade began to revive late in 1945, and to assist exports to the United Kingdom in that year, the Committee set aside £20,000, but claims in Australia against this totalled only £3,020 up to 30th June, 1946.

Jam production in New South Wales rose from an annual average of about 21,000,000 lb. in 1936-37 to 1938-39 to 54,667,000 lb. in 1943-44. It was affected by an adverse season in 1944-45, and in 1945-46 exceeded 46,000,000 lb. and was about 120 per cent. above the pre-war average. Details follow of the quantity and value of jam produced in each of the ten years ended 30th June, 1946:—

TABLE 438.—Jam Manufactured, 1936-37 to 1945-46.

Year ended 30th June.	Jam Manufactured.		Year ended 30th June.	Jam Manufactured.	
	Quantity.	Value at Factory.		Quantity.	Value at Factory.
	lb.	£		lb.	£
1937 ... ..	21,407,212	469,078	1942 ... ..	37,193,363	1,022,259
1938 ... ..	20,996,010	463,193	1943 ... ..	52,029,673	1,335,795
1939 ... ..	20,634,787	528,049	1944 ... ..	54,666,802	1,432,527
1940 ... ..	29,549,423	720,367	1945 ... ..	43,351,987	1,365,348
1941 ... ..	32,872,895	782,570	1946 ... ..	46,182,769	1,402,424

Very little fruit was used for the production of fruit juices before the war (1939-45), but in response to special demands for the armed services, especially Allied, this activity expanded and the extraction of tomato juice also developed. The quantities produced were:—

	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
	gal.	gal.	gal.	gal.	gal.
<b>Fruit Juices</b> ... ..	191,683	718,066	1,396,521	1,176,429	362,228
<b>Tomato Juice</b> ... ..	...	...	291,677	714,918	234,750

### *Dried Fruits.*

The cultivation and drying of vine fruits is important in the Murrumbidgee, Coomealla, Curlwaa, Goodnight and Pomona Irrigation Areas. Prunes are grown in the Murrumbidgee Irrigation Area and in the Young district, and dried apricots, pears and nectarines are produced in the Murrumbidgee and Curlwaa irrigation districts. Small quantities of dried fruits are produced in the Junee, Albury and Euston districts.

All dried fruits must be handled in registered packing houses and graded and packed hygienically in properly branded boxes. The New South Wales Dried Fruits Board regulates the marketing of dried fruits in New South Wales and the Commonwealth Dried Fruits Control Board has controlled exports since 1924. The system of marketing gives to each producer an equal share of local sales (which normally represent about one-fifth of the dried fruits produced) and the less profitable overseas marketings. Quotas, uniform in all States, are declared by the State Boards each season, fixing the proportion of each kind of dried fruit which may be sold within the State. Toward the cost of administration packers contribute at the rate of 4s. 3d. per ton of dried fruits. The quotas for dried vine fruits in the years 1937 to 1946 are given in the next statement; all dried tree fruit from 1941 to 1945 was requisitioned for the services and no quotas for these were determined in those years, or in 1946 when appreciable quantities again became available to civilians:—

TABLE 439.—Dried Vine Fruits—Marketing Quotas, 1937 to 1946.

Kind of Dried Fruit.	Quota for Intra-State Trade—Per cent. of Production.									
	1937.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.
Currants ...	19	15	14	15	23	30½	27½	30	30	33
Sultanas ...	17	13	19	14	17	20½	26½	32	32	22½
Lexias ...	47½	45	50	45	39	50½	46½	42½	50	58

Fluctuations from year to year in production of dried fruits are occasioned mainly by seasonal factors, and the higher level in the last ten years was due at first to the greater area, and later the greater maturity of vines. The output of both vine and tree dried fruits was affected seriously by dust-storms, the shortage of fertiliser, and late-frosts in some areas in 1945 and by excessive rain in January-March in 1946. Diversion of fruit to other uses caused the recent decrease in dried apricots and peaches. Although there were fewer trees, prune production exceeded the pre-war average in the seasons 1942 to 1944, but was halved by drought in 1945 and hampered by adverse ripening and drying conditions in 1946.

The following statement gives particulars of the production of dried fruits in New South Wales in each of the last eleven years as recorded by the State Dried Fruits Board.

TABLE 440.—Dried Fruits, Production, 1936 to 1946.

Calendar Year.	Dried Fruits.								
	Currants.	Sultanas.	Lexias.	Prunes.	Peaches.	Apricots.	Nectarines.	Pears.	Total.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1936 ... ..	691	4,223	371	1,541	152	384	10	9	7,387
1937 ... ..	994	4,981	350	2,444	124	123	5	11	9,032
1938 ... ..	1,070	5,805	384	2,131	130	326	4	7	9,886
1939 ... ..	1,282	4,114	395	1,049	120	187	2	2	7,151
1940 ... ..	1,509	7,411	501	1,604	87	188	2	3	11,305
1941 ... ..	1,016	6,256	524	1,343	107	162	3	6	9,417
1942 ... ..	1,381	7,489	532	2,155	86	341	4	6	11,994
1943 ... ..	1,261	7,279	600	2,219	68	104	...	1	11,560
1944 ... ..	1,527	7,431	662	2,270	47	105	2	5	12,058
1945 ... ..	990	4,342	600	1,098	23	14	3	1	7,071
1946 ... ..	889	6,570	568	2,052	29	55	1	...	10,164

During the war years (1939 to 1945) the United Kingdom Government purchased the residue of each season's dried fruits crop after local requirements and allocations to Canada and New Zealand had been met. Increased proportions of the small 1945 crop were allocated to these countries, and in compensation for the reduced quantity sold in the more remunerative local market, growers were paid subsidy by the Commonwealth on that season's output at rates per ton of £3 10s. on currants, £3 on sultanas and 3s. 4d. on lexias.

The United Kingdom Government has contracted to take all dried vine fruit of the 1946, 1947 and 1948 seasons in excess of Australian, Canadian and New Zealand requirements at prices (Australian currency) on f.o.b., Australian port basis, per ton of £50, for currants and £65 for sultanas, both from one crown upwards, and £64 7s. 6d. for lexias, four, five and six crown. These prices are £6 17s. 6d. for currants and £8 8s. 9d. for lexias above those paid per ton in 1945.

#### VEGETABLES.

Statistics of vegetable growing in New South Wales from 1942-43 embrace practically all varieties of vegetables grown for human consumption *except* on holdings less than an acre in extent or in home gardens. Formerly, information as to varieties produced was obtained only from holdings with an acre or more of any one kind of vegetable; market garden statistics were confined to the total acreage and value of all crops produced. Information regarding the marketing of vegetables in New South Wales is given at a later page.

To cope with heavy demands from our own and Allied Services for fresh and processed vegetables, the Commonwealth promoted increased vegetable growing during the war years by publicity, contracts with growers, and the establishment and operation of pools of specialised machinery (see page 438). In New South Wales the area of crops of vegetables for human consumption rose from 81,051 acres in 1942-43 (then already much in excess of the pre-war area) to 133,422 acres in 1944-45. Government contracts to growers were reduced in 1945-46 and the area decreased to 103,000 acres in that year, when there were 2,382 fewer holdings with vegetable crops than in 1944-45.

The following statement shows the number of holdings on which vegetables were grown for human consumption and the area of the crops in various divisions in each year since 1942-43:—

TABLE 441.—Vegetables—Holdings and Area of Crops in Divisions.

Division.	Holdings.				Area of Vegetable Crops.			
	1942-43.	1943-44.	1944-45.	1945-46.	1942-43.	1943-44.	1944-45.	1945-46.
	No.	No.	No.	No.	acres.	acres.	acres.	acres.
<b>Coastal—</b>								
North Coast ... ..	3,577	3,522	3,598	2,859	11,060	14,182	15,992	11,238
Hunter and Manning ...	2,308	2,262	2,207	1,840	8,917	9,978	11,068	9,174
Metropolitan ... ..	1,783	1,677	1,902	1,806	8,072	9,392	10,106	8,358
South Coast ... ..	1,304	1,252	1,273	1,076	7,051	8,253	9,665	7,554
<b>Total ... ..</b>	<b>8,972</b>	<b>8,713</b>	<b>8,980</b>	<b>7,581</b>	<b>35,100</b>	<b>41,805</b>	<b>46,831</b>	<b>36,324</b>
<b>Tablelands—</b>								
Northern ... ..	1,212	1,297	1,311	1,125	13,585	21,335	30,188	21,835
Central ... ..	2,010	2,146	2,151	1,851	21,297	34,746	38,670	32,239
Southern ... ..	340	466	476	361	1,481	2,872	3,094	1,848
<b>Total ... ..</b>	<b>3,562</b>	<b>3,909</b>	<b>3,938</b>	<b>3,337</b>	<b>36,363</b>	<b>58,953</b>	<b>71,952</b>	<b>55,922</b>
<b>Western Slopes—</b>								
North ... ..	315	355	316	227	1,374	1,941	1,880	1,260
Central ... ..	235	235	225	160	1,188	1,884	2,408	1,430
South ... ..	507	538	465	415	2,181	3,643	3,308	2,445
<b>Total ... ..</b>	<b>1,057</b>	<b>1,128</b>	<b>1,006</b>	<b>802</b>	<b>4,743</b>	<b>7,468</b>	<b>7,596</b>	<b>5,135</b>
<b>Central Plains—</b>								
North ... ..	77	79	70	65	458	535	498	274
Central ... ..	37	36	41	37	144	134	167	165
Riverina ... ..	664	671	662	503	3,804	6,431	5,742	4,502
<b>Total ... ..</b>	<b>778</b>	<b>786</b>	<b>773</b>	<b>605</b>	<b>4,406</b>	<b>7,100</b>	<b>6,407</b>	<b>4,941</b>
<b>Western Division ... ..</b>	<b>113</b>	<b>142</b>	<b>143</b>	<b>133</b>	<b>445</b>	<b>598</b>	<b>636</b>	<b>718</b>
<b>Total, New South Wales</b>	<b>14,482</b>	<b>14,678</b>	<b>14,940</b>	<b>12,458</b>	<b>81,057</b>	<b>115,924</b>	<b>133,422</b>	<b>103,040</b>

NOTE.—Particulars of vegetables grown for animal fodder are not included—see page 489.

More than half the area of vegetable crops is in the Central and Northern Tablelands Divisions, where there has been remarkable expansion in recent years. In 1945-46 the area in the Central Tablelands, 32,239 acres, included 20,120 acres of green peas and 6,301 acres of potatoes. In the Northern Tablelands the area was 21,835 acres and the principal varieties were potatoes, 6,690 acres, navy beans, 8,054 acres and green peas, 5,298 acres.

In the Coastal Divisions there were 36,324 acres or 35 per cent. of the vegetable crops, including potatoes, 6,911 acres; green peas, 6,755 acres; French beans, 6,090 acres; pumpkins, 3,533 acres; tomatoes, 2,599 acres and cabbages, 1,370 acres; as well as Swede turnips, carrots, cauliflowers, etc.

In the Western Slopes Division potatoes and green peas are the most extensive crops and in the irrigation districts of the Riverina, green peas, tomatoes and carrots are the principal varieties.

The growing of navy beans (mainly in the Northern Tablelands division) was a war-time development, and was by contract to the Commonwealth Government. From 1946-47 the Navy Bean Marketing Board assumed control of the marketing of navy beans in New South Wales.

TABLE 442.—Vegetables—Varieties Grown, 1942-43 to 1945-46.

Vegetable.	1942-43.			1944-45.			1945-46.		
	Area.	Production.		Area.	Production.		Area.	Production.	
		Quantity.	Farm Value.		Quantity.	Farm Value.		Quantity.	Farm Value.
Potato ...	acres.	tons.	£	acres.	tons.	£	acres.	tons.	£
Turnip (Swede) ...	24,488	64,728	665,350	34,796	80,587	1,063,750	22,865	61,768	759,750
Carrot ...	2,823	7,042	54,020	5,396	12,510	74,750	2,505	6,874	38,270
Onion ...	1,923	7,475	128,660	4,397	18,632	280,880	2,394	13,437	206,480
Parsnip ...	1,096	3,288	46,510	835	2,587	44,010	747	2,939	42,100
Sweet Potato ...	517	1,798	47,680	667	2,985	57,540	438	2,319	46,720
Beetroot ...	461	1,676	43,160	723	2,680	31,310	502	1,712	27,350
Pumpkin ...	689	2,265	51,980	1,175	5,704	105,550	1,148	5,494	95,140
Melon ...	6,751	15,594	121,110	7,512	18,429	202,640	5,689	14,841	108,770
(Water & Rock). Marrow, Squash Asparagus ...	1,261	5,610	70,120	2,154	7,705	73,520	1,805	7,610	72,850
Bean— French ...	671	3,222	17,900	526	1,998	33,300	428	1,634	28,590
Navy ...	501	532	21,030	589	726	26,550	496	688	25,970
Pea— Green ...	...	bush.	...	...	bush.	...	...	bush.	...
Blue Boller ...	6,014	542,019	327,470	8,254	754,717	339,620	7,381	607,804	435,590
Cabbage ...	2,792	21,014	29,420	8,869	70,468	79,860	8,550	55,214	62,580
Cauliflower ...	20,205	966,537	745,040	41,939	1,228,222	711,350	35,025	1,245,643	1,131,460
Silver Beet, ...	798	8,203	6,220	384	7,882	2,860	...	...	...
Spinach ...	2,437	758,303	329,120	3,330	933,665	346,880	2,610	772,281	437,090
Rhubarb ...	1,429	338,694	217,570	1,086	539,808	335,510	2,268	664,575	588,420
Lettuce ...	...	doz.	...	...	doz.	...	...	doz.	...
Tomato ...	...	bunches.	...	...	bunches.	...	...	bunches.	...
Cucumber ...	431	184,612	44,870	365	248,367	52,610	393	230,866	81,770
Other ...	110	70,887	18,710	109	81,006	21,090	102	69,781	20,350
Total ...	887	335,413	104,820	1,060	447,116	184,740	1,122	406,638	175,080
...	...	cases.	...	...	cases.	...	...	cases.	...
...	...	cases.	...	...	cases.	...	...	cases.	...
...	...	cases.	...	...	cases.	...	...	cases.	...
...	3,847	1,097,922	878,340	5,649	1,878,319	1,087,360	4,845	1,668,653	1,029,000
...	455	98,861	27,190	676	128,836	45,090	513	111,780	35,860
...	491	...	20,720	2,031	...	86,650	1,214	...	64,330
Total ...	81,057	...	4,017,010	133,422	...	5,287,920	103,040	...	5,513,520

Generally the potato is the vegetable most extensively grown in New South Wales, but in the years 1943-44 to 1945-46 the area of this crop, though larger than usual, was exceeded by the area under peas which expanded from 20,205 acres in 1942-43 to 41,939 acres in 1944-45 and declined to 35,025 acres in 1945-46. The crops of potatoes and green peas represented 55 per cent. of the vegetable acreage in 1942-43 and 1943-44, 57½ per cent. in 1944-45, and 56½ per cent. in 1945-46. Next in order in 1945-46 were navy beans, 8,550 acres (as compared with 2,792 acres in 1942-43); French beans, 7,381 acres; pumpkins, 5,689 acres; tomatoes, 4,845 acres; cabbage, 2,610 acres; swede turnips, 2,505 acres; and carrots, 2,394 acres.

#### *Vegetable Canning and Dehydration.*

Special war-time demands caused rapid expansion of the vegetable canning industry which was developing slowly before the war. In 1943-44

the output of canned vegetables was 47,605,410 lb. valued at canneries at £1,500,001, and although it decreased subsequently to 36,926,172 lb. valued at £1,278,471 in 1945-46, it was then  $7\frac{1}{2}$  times greater, both in quantity and in value, than in 1938-39.

The dehydration of vegetables in New South Wales was peculiarly a war-time measure. The dehydrated weight of vegetables produced was 291,580 lb. in 1941-42, 2,219,343 lb. in 1942-43, 3,660,621 lb. in 1943-44, 6,025,100 lb. in 1944-45 and 4,140,138 lb. in 1945-46.

A statement follows of the quantity and value of vegetables preserved in liquid in factories in New South Wales in each of the last ten years:—

TABLE 443.—Vegetable Canning, 1936-37 to 1945-46.

Year ended 30th June.	Vegetables Preserved in Liquid.		Year ended 30th June.	Vegetables Preserved in Liquid.	
	Quantity.	Value at Cannery.		Quantity.	Value at Cannery.
	lb.	£		lb.	£
1937 ...	4,091,623	128,033	1942	26,437,066	783,783
1938 ...	3,636,230	127,978	1943	34,105,259	1,035,957
1939 ...	4,902,288	170,092	1944	47,605,410	1,500,001
1940 ...	5,572,406	191,047	1945	43,407,345	1,472,918
1941 ...	14,854,400	386,311	1946	36,926,172	1,278,471

### *Potatoes.*

All persons growing an acre or more of potatoes must be licensed under the Potato Growers' Licensing Act, 1940, at a fee of 10s. per annum. The amount of fees collected is expended for the benefit of the industry. From April, 1942, the production and distribution of potatoes was controlled by the Australian Potato Committee under National Security Regulations which are continued in force under the Defence (Transitional Provisions) Act, 1946. In 1942-43 growers were paid the difference between a guaranteed and the market price of potatoes. Contracts were entered into with growers in later years and are to be made also during the season ending October, 1948. From July, 1943, the retail price to civilian consumers was fixed and subsidies were paid under the Commonwealth price stabilisation plan covering the difference between that price and the cost of potatoes to distributors.

A Potato Marketing Board was constituted on 2nd April, 1947, pursuant to a poll of growers taken under the State Marketing of Primary Produce Act, 1927-40, to control potato marketing after the contract production system terminates, and meanwhile to co-operate with the Australian Potato Committee. The Board is comprised of five potato growers' representatives and two government nominees.

Local potatoes meet only part of the State's requirements and large quantities are imported from other States, principally Tasmania and Victoria. From two-thirds to three-quarters of the area of potato crops has

been in the Northern and Central Tablelands and North Coast divisions in recent years, as the following particulars indicate:—

TABLE 444.—Potatoes—Area and Production, 1934-35 to 1945-46.

Divisions.	1934-35 to 38-39* Annual Average.		1943-44.		1944-45.		1945-46.	
	Area.	Pro- duction.	Area.	Pro- duction.	Area.	Pro- duction.	Area.	Pro- duction.
	acres.	tons.	acres.	tons.	acres.	tons.	acres.	tons.
North Coast ...	2,057	5,504	5,975	14,881	6,471	11,547	4,062	9,717
Other Coastal ...	2,668	7,059	4,226	11,104	5,195	10,407	2,849	7,852
Northern Tableland ...	5,516	11,716	7,452	20,108	10,993	32,348	6,690	15,237
Central Tableland ...	7,824	19,823	8,361	13,188	7,691	16,585	6,301	19,263
Other ...	3,045	8,976	4,053	6,374	4,446	9,700	2,963	9,699
Total ...	21,110	53,078	30,067	65,655	34,796	80,587	22,865	61,768

\* Field crops only; market gardens excluded.

In the five seasons ended 1938-39 the annual average area (excluding market gardens) under potatoes was 21,110 acres and production 53,078 tons. In 1945-46 the area (including potatoes in market gardens) and the quantity produced were less by 11,931 acres and 18,819 tons than in 1944-45, when they were the greatest of any recent year (34,796 acres and 80,587 tons). Holdings with an acre or more of potatoes numbered 4,887 in 1944-45 and 3,359 in 1945-46. In the seasons 1934-35 to 1938-39 the number (exclusive of market gardens) averaged 3,647 per annum.

#### *Vegetables for Animal Fodder.*

Vegetables grown for animal fodder are not included in the foregoing statistics of vegetable crops. In 1942-43 vegetables for livestock were grown on 6,673 acres, including 5,704 acres of turnips. These crops were most extensive in the Northern Tableland division 2,423 acres; Hunter-Manning, 1,549 acres and North Coast 1,291 acres in 1945-46.

Turnips and pumpkins are the vegetables most grown for this purpose. The area and production of these together with the area sown with vegetables of all kinds for animal fodder in the seasons 1943-44 to 1945-46 were as follows:—

Year.	Turnips for Fodder.		Pumpkins for Fodder.		All Vegetables for Fodder.
	Area.	Production.	Area.	Production.	Area.
	acres.	tons.	acres.	tons.	acres.
1943-44 ...	5,177	14,343	1,650	4,002	7,403
1944-45 ...	6,917	27,699	1,811	4,469	9,290
1945-46 ...	6,073	25,747	1,570	4,207	8,105

#### PLANT DISEASES ACT, 1924.

A brief description of this Act was published at page 606 of the Year Book for 1928-29.

#### MARKETING OF FRUIT AND VEGETABLES IN NEW SOUTH WALES.

The principal centre in New South Wales for the marketing of fresh fruit and vegetables is Markets 1, 2, 3 and 6 of the Sydney Municipal Markets, which, with 86 market stores and the incorporated cold stores (capacity 300,000 cubic feet) were valued at 31st December, 1946, at £1,000,314. Large quantities of hard vegetables are bought wholesale in

Sydney at the Alexandria railway goods station and at Sussex-street merchants' stores. There are markets of less importance at Newcastle, West Maitland and other cities and towns. Special boards deal with the marketing of potatoes and navy beans as indicated in preceding pages.

Fruit and vegetables reach Sydney by rail, road and sea, and are carried by express freight trains from adjoining States, the North Coast, the Murrumbidgee Irrigation Area and the Batlow district. Freight rate concessions are made on consignments in truck lots.

Growers usually consign their produce to agents and co-operative societies for sale by private treaty on a commission basis, to wholesale merchants (mainly hard vegetables), or sell direct to buyers in a section of the Municipal Markets known as the Producers' Market. Stands in the vegetable and fruit markets are allotted by the Superintendent of Markets. The stores are leased for periods of up to two years at rentals of from 19s. 4d. to £7 per week. For the stands the dues are 2s. per day except in the producers' market where they vary from 2s. to 3s. per day. The buyers comprise mainly retailers, manufacturers, shipping, hotel and restaurant suppliers, interstate traders and suppliers of country orders.

Fruit is sold usually in one-quarter, one-half or bushel cases. Pine-apples, paw paws, etc. are packed in tropical cases ( $1\frac{1}{2}$  bushels) as were bananas until late in 1946 since when  $1\frac{1}{3}$ -bushel cases have been used. The principal varieties of fresh fruit marketed, the approximate weight per bushel and the size of case used for each are shown below.

TABLE 445.—Fruit—Weight per bushel and Size of Case used—  
New South Wales.

Kind of Fruit.			Weight per bushel.	Size of case used.	Kind of Fruit.			Weight per bushel.	Size of case used.
			lb.	bus.				lb.	bus.
Apples*	...	...	42	1	Grapes ...	...	...	50	$\frac{1}{2}$
Apricots	...	...	55	$\frac{1}{2}$	Nectarines	...	...	48	$\frac{1}{2}$
Bananas	...	...	50	$1\frac{1}{3}\dagger$	Passion Fruit	...	...	34	$\frac{1}{2}$
Cherries	...	...	48	$\frac{1}{4}$	Peaches	...	...	44	$\frac{1}{2}$
Citrus—					Pears§	...	...	50	1
Oranges‡	...	...	48	1	Pineapples	...	...	40	$1\frac{1}{2}$
Lemons‡	...	...	47	1	Prunes	...	...	60	$\frac{1}{2}$
Mandarins‡	...	...	46	1	Quinces	...	...	42	1
Figs	...	...	36	$\frac{1}{4}$	Tomatoes	...	...	48	$\frac{1}{2}$

\* Export apples—Average 44 lb. per case, minimum 42 lb. during 1946–1947. † Replacing tropical case ( $1\frac{1}{2}$  bus.)  
‡ Export citrus— $1\frac{1}{3}$  bushel case. § Softwood case; hardwood case, 45 lb.

Vegetables reach the markets in crates, cases, bags, bunches and loose, and mostly are sold as received in the agents' markets and in the same way or loose off the floor in the producers' market. Peas and French beans are generally packed in three bushel bags (some beans in  $1\frac{1}{2}$  bushel cases) and are sold per bushel of 28 lb. and 20 lb. respectively; beetroot, carrots, parsnips and swede turnips are bunched or bagged in 3-bushel Chapman sacks and sold per bag, per dozen bunches or by weight. There are standard 80-lb. and 140-lb. bags for onions, sold per bag or per cwt., as are potatoes, pumpkins and sweet potatoes which are marketed in Chapman sacks. Lettuces are sold per open case of from 1 to  $1\frac{1}{2}$  bushels, and cases are used also for asparagus (sold per dozen bundles), cucumbers (sold by case or count) and mushrooms (sold by weight). Radishes, rhubarb,



spinach, eschalots and some celery (otherwise crated) are bunched and sold per dozen bunches. Cabbages, cauliflowers and some jam melons arrive loose, are sorted to size and quality and sold by count. Other jam melons are bagged and are sold by the bag or by weight.

Officers of the Department of Agriculture attend the market to ensure that vegetables and fruit have been graded and packed, and that disease-affected produce is destroyed, as required under the Plant Diseases Act, 1924; to inspect agents' records in connection with complaints by growers and others, and to collect wholesale prices data for record purposes and for publication.

*Farm Produce Agents Act.*

Persons who, as agents, sell fruit, vegetables, potatoes and other edible roots and tubers, eggs, poultry, honey, etc. must be licensed under the Farm Produce Agents Act, 1926-32, except that auctioneers registered under the Auctioneers, Stock and Station and Real Estate Agents Act need not hold a licence to auction farm produce beyond a radius of ten miles from the General Post Office, Sydney.

Agents must provide a bond from an approved insurance company, may not, without written consent of the vendor, buy produce consigned to them for sale, must keep books in the form prescribed and must conform to the approved practices of their calling. The gross proceeds from the sale of produce, less commission and other charges, must be accounted for to growers. Commission may not exceed  $7\frac{1}{2}$  per cent., subject to minimum rates of 6d. per bushel case, 4d. per one-half bushel case and 2d. per quarter-bushel case for fruit and tomatoes, and to the exception that for produce auctioned outside a radius of ten miles from the General Post Office, Sydney, and in respect of vegetables, potatoes and other edible roots and tubers sold at auction or otherwise, a maximum commission rate of 10 per cent. may be charged.

In July, 1946, the number of agents registered was 292 of whom 267 were in the metropolitan area, 22 in Newcastle and 3 in other country centres.

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## WATER CONSERVATION AND IRRIGATION.

In a large portion of New South Wales where the rainfall is low and irregular, and the rate of evaporation is high, the conservation of water for agricultural and pastoral purposes is necessary for the full utilisation of natural resources.

Public and private projects in New South Wales provide for the supply of water for rural purposes to approximately 18,500,000 acres, including nearly 3,000,000 acres for purposes of intensive or extensive irrigation and about 15,500,000 acres for domestic and stock purposes only. A brief summary of the recommendations of the Commonwealth Rural Industries Commission in regard to water conservation and irrigation in Australia is given on page 414 of this Year Book.

The control of water conservation (other than town and domestic supplies) is vested in the Water Conservation and Irrigation Commission, which consists of the Minister for Conservation, as Chairman *ex officio*, and two other members appointed by the Governor. The Commission controls the works for water conservation and conducts investigations relating to water storages throughout New South Wales; it administers the irrigation areas established by the State; exercises statutory control of private irrigation and issues licenses under the Water Act to landholders; establishes water trusts and districts for the supply of water for domestic purposes and stock and irrigation, and constructs works for such trusts and districts. The Commission also controls the use of artesian waters.

Control of the waters of the River Murray for the benefit of the States concerned—New South Wales, Victoria and South Australia—is exercised by the River Murray Commission in terms of the Murray Waters Agreement between these States and the Commonwealth. The Commission consists of representatives of the Governments; a Commissioner of the Water Conservation and Irrigation Commission represents New South Wales. The agreement provided for the construction of locks and weirs in the Murray and Murrumbidgee Rivers and Lake Victoria storage (551,700 acre feet), of barrages at the mouth of the river in South Australia, of the Hume Reservoir for the purpose of regulating the flow of the Murray River and for ensuring an equitable allocation of its flow between the States. The storage capacity of the Hume Dam is 1,250,000 acre feet. The allocations per annum are as follow:—New South Wales, 1,957,000 acre feet, Victoria, 2,219,000

acre feet and South Australia, 1,254,000 acre feet. Any surplus over these quantities may be allocated by the River Murray Commission from time to time. In New South Wales the Water Conservation and Irrigation Commission administers the State's share of the stored waters and carries out schemes for its use.

The Water Conservation and Irrigation Commission summarises the irrigation and water supply projects which it controls as follows:—

TABLE 446.—Extent of Irrigation in New South Wales, 1945-46.

Projects.			Land for Irrigation.			Water Supplied.	
Nature of Supply.	No.	Area.	Irrigable Area.	Holdings with Irrigable Land.	Area Actually Irrigated.	For Irrigation	For Stock and Domestic Purposes.
		acres.	acres.	No.	acres.	acre ft.	acre ft.
Irrigation areas (intensive) ...	4	434,620	206,636	2,481*	133,468*	245,248*	8,101*
Irrigation districts (extensive)	7	2,050,240	404,800	1,230	132,468	152,843	6,461
Flood control districts (extensive) ...	1	352,300	133,958	50	29,565	6,094	...
Irrigation trusts ...	7	16,031	7,000	181	3,039	6,133	...
Licensed irrigators ...	2,777	137,758†	137,758	2,777	32,490	101,807	...
Total ...	...	2,990,949	890,152	6,719	331,030	511,925	14,562

\* Includes 27 holdings supplied under agreement; area irrigated, 6,007 acres; water, for irrigation, 5,740 acre ft. and for domestic and stock purposes, 4,728 acre ft. † Irrigable area only.

## IRRIGATION AREAS ESTABLISHED BY THE STATE.

The Irrigation Areas established by the State of New South Wales are the Murrumbidgee, Curlwaa, Coomealla and Hay Irrigation Areas. The system of land administration applying to these areas and the tenures under which the lands are occupied are described in the chapter "Land Legislation and Settlement".

The source of water supply for the Murrumbidgee Irrigation Areas is the Murrumbidgee River. A large concrete dam has been constructed at Burrinjuck at the head of the river. Its capacity is nearly 33,613 million cubic feet (771,640 acre feet), the maximum depth of water is 200 feet, and the area of water surface is 12,780 acres. Water stored in the dam is conveyed along the river channel for a distance of about 240 miles to Berembend Weir where it is diverted into the main canal which, at the off-take, has a capacity of 1,600 cubic feet per second. The main canal has been constructed for a distance of 96½ miles to supply the Murrumbidgee Irrigation Areas by means of a system of reticulation channels. The total length of the canals, channels and pipe lines (including drainage channels) is over 1,600 miles. In addition there are approximately 377 miles of channels supplying districts and water trusts adjacent to the Irrigation Areas. At Burrinjuck Dam, hydro-electric power works have been installed which form an important part of the electric power system of New South Wales.

Particulars of the Murrumbidgee Irrigation Areas are shown below:—

TABLE 447.—Murrumbidgee Irrigation Areas, 1925-26 to 1945-46.

Year ended 30th June.	Water Distributed.	Value of Rural Production. *	Revenue derived.			
			Water Rates and Charges.	Land Lease Rentals.	Interest on Advances.	Other Revenue.
	acre feet	£	£	£	£	£
1926	81,949	800,000	38,707	73,287	120,086	650
1931	173,696	868,000	56,239	83,914	81,248	1,527
1936	267,890	1,184,000	80,056	53,928	42,770	7,283
1937	281,564	1,440,000	82,235	49,290	47,567	4,852
1938	368,660	1,539,000	107,339	47,386	50,252	4,164
1939	243,183	1,790,700	71,517	46,443	54,027	2,456
1940	261,100	1,831,900	80,618	48,686	55,274	802
1941	332,643	1,942,000	107,289	45,478	55,006	2,237
1942	349,877	2,067,000	112,270	45,347	52,986	2,156
1943	304,429	2,518,100	100,394	46,287	52,038	2,349
1944	347,423	3,336,500	114,607	46,356	49,147	2,417
1945	238,332	2,590,800	85,462	45,770	47,818	2,728
1946	232,731	2,693,500	81,187	45,447	46,887	3,362

\* Excluding value added in factories.

During the years of depression the Government granted to settlers many concessions in respect of water charges and rentals. Information respecting these concessions is published in the chapter "Land Legislation and Settlement" of the 1937-38 issue of the Year Book.

The capital expenditure of the Murrumbidgee Irrigation Areas and Burriajuck Dam was £10,444,036 as at 30th June, 1946, of which £10,242,695 was expended from Loan Account. This sum was reduced by £2,149,256 written off for various reasons, mainly on account of Soldier Settlements.

The Irrigation Areas of Curlwaa, 10,550 acres, and Coomealla, 35,450 acres, are situated on the Murray River near its junction with the Darling. Water for irrigation is pumped from the Murray River.

The Hay Irrigation Area, 6,806 acres, is on the Murrumbidgee River and derives its supplies by pumping from the river. The main industry is dairying.

#### *Production of Irrigation Areas*

Comparative statistics of the production of the irrigation areas established by the Government of New South Wales are shown in the following statement. Farming operations on the Murrumbidgee area commenced in the season 1912-13, and the first section of the Coomealla project became available in 1925.

The total area under occupation (including non-irrigable lands) in these areas as at 30th June, 1946 was Murrumbidgee, 337,281 acres; Coomealla, 34,612 acres (including 31,170 acres of undeveloped land leased for grazing); Curlwaa, 8,907 acres; and Hay, 5,992 acres:—

TABLE 448.—Irrigation Areas—Production, 1930-31 to 1945-46.

Particulars.	1930-31.	1938-39.	1940-41.	1943-44.	1944-45.	1945-46.
Cultivated Holdings...No.	1,598	1,579	1,545	1,455	1,553	1,537
Area under—						
All Crops ... Acres	114,441	128,466	107,513	101,560	90,947	113,546
Rice ... ..	19,825	22,456	23,446	31,111	17,199	19,985
Other Grain ... ..	55,444	56,484	32,690	27,013	26,142	50,648
Hay & Green Food ..	16,032	23,459	25,578	14,297	19,349	15,801
Grape Vines—						
Bearing ... ..	6,301	8,737	8,947	8,279	8,173	8,032
Not yet Bearing ..	1,452	759	344	106	123	204
Orchards—						
Bearing ... ..	10,507	12,021	11,603	11,709	11,798	12,066
Not yet Bearing ..	4,079	3,692	3,632	3,508	3,179	3,030
Live Stock—						
Horses ... .. No.	6,131	6,842	6,385	6,159	5,917	5,387
Cattle—						
*Dairy ... ..	2,416	1,580	2,010	1,905	1,464	1,735
Other ... ..	3,163	4,221	4,572	4,881	6,253	6,035
Sheep ... ..	76,609	147,071	222,945	168,781	145,762	124,984
Pigs ... ..	1,889	1,065	3,840	4,005	3,437	2,469
Production—						
Wine ... .. gal.	904,402	2,245,183	2,895,465	3,229,368	2,370,425	2,630,090
Sultanas... .. cwt.	33,250	68,668	101,134	102,587	60,835	88,998
Raisins and Lexias ..	2,139	4,913	6,523	5,913	5,817	5,630
Currants ... ..	5,862	21,651	19,175	24,221	16,951	15,204
Oranges—bush.						
Wash'ton Navel ..	355,629	510,332	534,825	390,357	407,754	351,256
Valencia ... ..	199,990	430,390	522,416	391,449	406,699	388,435
All Other ... ..	24,340	18,360	21,683	17,129	14,866	19,002
Lemons ... ..	54,208	50,341	44,927	59,673	48,020	28,456
Peaches—						
Dessert & Drying ..	45,995	57,325	60,915	34,848	24,036	38,301
Canning ... ..	204,848	372,276	334,907	392,319	281,693	402,319
Nectarines ... ..	4,944	7,646	4,643	6,278	4,777	14,104
Apricots ... ..	86,079	127,397	142,970	192,350	80,797	195,217
Prunes ... ..	86,698	60,591	84,364	107,301	103,457	99,974
Apples ... ..	17,278	47,976	93,336	167,995	50,844	109,513
Butter ... .. lb.	374,121	198,084	218,417	198,592	164,863	149,095
Grain—Wheat ... bush.	503,664	710,295	200,685	348,093	175,728	630,000
Rice ... ..	1,427,413	2,657,760	2,155,574	2,976,320	1,269,387	2,005,760
Oats ... ..	68,247	152,847	41,868	115,520	79,272	274,950
Other ... ..	4,886	1,069	3,828	2,682	1,674	5,805

\* Cows in registered dairies only.

The area under crop was greatest (128,466 acres) in 1938-39. During the war years it fluctuated between almost 100,000 and 110,000 acres except in 1944-45 when it was 90,947 acres, and it increased again to 113,546 acres in 1945-46. Changes in rice, wheat and hay and green food acreages were the principal elements in the fluctuations. Particulars of rice-growing are given on page 470.

Experiments undertaken at the Rice Research Station at Yanco have shown that linseed for the manufacture of oil, stock feed, etc. can be produced satisfactorily.

Dairying tended to be replaced by fat lamb raising for some years after 1934-35 and in recent years "other" cattle have increased while sheep and (since 1940-41) dairy cattle have decreased in number. In 1945-46 compared with 1938-39 there were about 15 per cent. fewer sheep, about 10 per cent. more dairy cattle and about 43 per cent. more "other" cattle.

Oranges, peaches, apricots, apples, and prunes are the principal kinds of fruit produced. Grapefruit growing has expanded on irrigation areas where there were 20,861 bearing and 7,302 non-bearing trees in 1945-46, and the production was 40,516 bushels.

The following statement shows the number of fruit trees of the principal varieties on the irrigation settlements, distinguishing the productive from those not yet bearing:—

TABLE 449.—Irrigation Areas—Number of Fruit Trees, 1930-31 to 1945-46.

Fruit Trees.	1930-31.		1938-39.		1943-44.		1944-45.		1945-46.	
	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.
Orange—										
Seville ...	1,071	812	1,111	2,258	3,895	2,451	1,696	1,236	2,515	1,627
Washington										
Navel ...	228,445	65,529	237,773	17,465	194,036	15,870	193,604	13,864	185,462	14,601
Valencia ...	121,478	105,874	201,048	51,054	219,559	89,553	223,822	81,115	236,182	85,620
All other ...	14,429	4,476	9,372	1,290	5,418	750	7,245	2,746	6,922	190
Lemon ...	27,856	14,066	28,654	8,501	28,647	5,348	26,876	6,721	25,299	4,940
Mandarin ...	15,052	7,092	11,738	1,078	8,510	514	8,086	331	7,523	338
Peach—										
Dessert and										
Drying ...	32,194	2,691	27,996	15,349	20,194	6,646	18,819	9,572	19,561	8,359
Canning ...	160,621	54,153	181,883	113,002	227,073	100,644	232,461	86,326	238,112	75,984
Nectarine ...	4,566	1,079	4,004	1,224	4,735	4,100	5,011	4,364	7,930	3,596
Apricot ...	101,087	6,201	89,338	11,013	84,790	24,695	86,743	21,633	89,659	19,985
Prune ...	107,462	4,974	78,683	6,690	67,675	14,894	67,612	16,571	66,912	16,561
Plum ...	8,696	823	5,929	1,378	5,284	1,806	4,841	2,329	4,551	1,131
Pear—										
Williams ...	12,932	2,075	13,499	18,734	16,606	21,008	22,529	13,183	20,189	13,353
Other ...	6,925	918	5,295	3,678	7,534	3,965	8,247	2,061	10,751	5,022
Apple ...	51,577	69,603	97,229	52,097	63,626	4,597	59,358	3,166	58,999	3,534
Pig ...	6,359	4,833	7,750	1,652	9,548	1,029	8,409	1,411	9,497	1,803
Almond ...	22,785	6,214	33,984	20,171	37,690	5,368	35,446	4,554	34,571	3,547

There is a considerable area under grapes for wine, table and drying purposes. During the last five years vegetable growing has been expanded to supply fresh, canned and dried vegetables for military and civilian needs.

In addition to irrigated crops, extensive areas of pastures and land under fallow are irrigated. It has been estimated by the Water Conservation and Irrigation Commission that the total area irrigated for crops, pastures and fallow in New South Wales was 331,030 acres in 1945-46.

*Lachlan River Water Conservation Scheme.*

A dam with a capacity of 303,900 acre-feet has been constructed at Wyangala, on the Lachlan River, and the project includes balance storages in Lake Cargelligo (29,400 acre feet), already constructed, and in Lake Ballyrogan, above Hillston (108,000 acre feet), under construction, to assure water supplies for domestic purposes and stock along the full length of the river and effluent streams, and for streams which will be diverted for irrigation under licenses. The Jemalong and Wyldes Plains Irrigation Districts constituted under the Water Act are supplied with water under this scheme. The discharge of water from Wyangala Dam in 1944-45 and 1945-46 was 191,530 and 158,524 acre feet respectively.

*Namoi River Water Conservation Scheme.*

In December, 1937, the Government authorised the construction of a storage dam at Keepit on the Namoi River as a national work at an estimated cost of £1,340,000. The site of Keepit dam is about 26 miles east of Gunnedah upstream of the confluence with the Peel River. The scheme includes a diversion weir at Boggabri and extensive channel systems on either side of the Namoi River. The storage capacity of the dam will be about 345,000 acre-feet; it will be about 1,800 feet long and about 125 feet high above the river bed. The total expenditure to 30th June, 1946 was £396,882. Construction was suspended early in 1942, owing to war conditions, and was resumed in November, 1945.

*Darling, Macquarie and Hunter River Schemes.*

Authority to undertake schemes of water conservation on the Darling, Macquarie and Hunter Rivers is given by the Darling River Waters Act, 1945, the Burrendong Dam Act, 1946, and the Glenbawn Dam Act, 1946, respectively. Work has been commenced on the Darling River scheme which provides for from thirty to forty weirs to enable the supply of water for stock and domestic use, to augment the Broken Hill supply, and for irrigation of limited areas. From the Burrendong Dam, to store 520,000 acre-feet, about 6,700,000 acres may be supplied with stock and domestic water but only a very small area with water for irrigation. The Glenbawn Dam, to be located on the Hunter River about 8 miles above its confluence with Page's River and to hold about 120,000 acre-feet, is the first of five storage dams proposed in the Hunter River system. Regulation of the river flow and the provision of piped water for irrigation of about 31,000 acres of river flats between Aberdeen, Muswellbrook and Denman are the purposes of the scheme.

The estimated cost of the Darling River weirs scheme is £450,000, of the Burrendong Dam, £2,000,000 and of the Glenbawn Dam, £1,500,000.

## WORKS UNDER THE WATER ACT, 1912-46.

*Irrigation Districts.*

The Water Act, 1912-1946 makes provision for the constitution of districts for water supply. These differ from the Water Trusts, described later, in that the charges payable by landholders for water are intended to cover maintenance and operation by the Commission and contribution towards interest on capital cost. Landholders, however, are not required to repay the cost of the works constructed by the State.

The following districts had been constituted up to 30th June, 1946:—

TABLE 450—Irrigation Districts.

District.	Supplied from—	Area Served.	Water Rights Attached.	Date of Constitution.
		† acres.	† acre feet.	
Wakool ... ..	Murray River ...	502,820	37,200	4 July, 1941
Berriquin (Provisional) ...	do ...	622,307†	57,115†	9 Mar., 1934
Deniboota (Provisional) ...	do ...	303,064	23,935	16 Dec., 1938
Denimein (Provisional) ...	do ...	140,850	11,240	11 Jan., 1946
Barramein* (Provisional) ...	do ...	88,651	.....	5 April, 1946
Jernargo* (Provisional) ...	do ...	130,850	.....	18 April, 1941
Benerembah ... ..	Murrumbidgee River	121,744	12,030	23 Oct., 1936
Tabbita ... ..	do	6,316	650	16 Aug., 1935
Wah Wah ... ..	do	567,760	3,755	11 Jan., 1946
Jemalong ... ..	Lachlan River ...	171,580	7,980	25 June, 1943
Wyldes Plains ... ..	do ...	51,346	1,295	28 June, 1935
Total Area ...	... ..	2,707,288	155,200	

\* Domestic and stock water supply only. † At date of constitution.

† Includes lands with water rights added during 1945–46.

Water is supplied to landholders for fodder crops or sown pastures but not for commercial orchards, vineyards, or for rice (except in the circumstances indicated at page 470).

During the year ended 30th June, 1946, water was supplied to holdings within the Tabbita, Benerembah, Wah Wah, Wakool, Berriquin, Jemalong and Wyldes Plains districts.

The works for the Wakool, Berriquin, Deniboota, Denimein, Barramein and Jernargo districts are projects for the utilisation of the New South Wales share of the Murray waters conserved in the Hume Dam.

The works for the Berriquin district include the Mulwala Canal, which branches from the Murray at Yarrawonga Weir. It supplements the supply of water from the Edward River to the Wakool district and serves the Deniboota district by a pipe syphon passing under the Edward River. When completed, it will be about 100 miles in length. Its capacity at the offtake is 5,000 acre-feet per day. The Mulwala canal was completed as far as the Edward River, 75½ miles, in 1942. The Berrigan Channel, 22 miles, was completed in 1944. The approximate length of canal, channels and escape channels at 30th June, 1946 was 737 miles.

The cost of the Wakool district works was about £513,300; of the Benerembah works, £43,273; the Tabbita works, £4,658; and the Wyldes Plains and Jemalong projects, £188,800. Up to 30th June, 1946, approximately £1,469,000 had been expended upon construction of the Mulwala Canal and the Berriquin district works, and £281,000 on the Deniboota scheme.

#### *Flood Control and Flood Irrigation.*

In December, 1940, the Water Act was amended to empower the Commission to constitute flood control districts and flood control and irrigation districts, where works may be constructed for controlling or partly controlling floods and supplying water for irrigation by flooding. Before



constituting them particulars of the proposed districts, purpose, rates, and works must be published by the Commission and objections must be considered by the Land Board. Pending completion of the works the areas are notified as provisional districts. Landholders within the districts deemed to be benefited by the works are to pay rates as levied by the Commission. Municipal or shire councils may be compensated for damage to any public road resulting from flooding caused by the operation of the works, and in certain circumstances landholders on whose land such works are constructed may claim compensation for the land used or in respect of severance resulting from the works.

The works (in progress) for the Lowbidgee Provisional Flood Control and Irrigation District of approximately 367,000 acres, constituted on 9th February, 1945, are to flood irrigate about 140,000 acres of pasture lands by diversion of water from the Maude and Redbank Weirs on the lower Murrumbidgee River. Works are practically complete for the Medgun Provisional Flood Control and Irrigation District constituted on 1st March, 1946, and embracing about 272,800 acres on either side of Medgun Creek about 40 miles north-west of Moree.

#### *Water Trusts.*

The Water Act, 1912-1946 vests in the Water Conservation and Irrigation Commission for the benefit of the Crown the right to use and control the water in rivers and lakes in New South Wales. Trust districts may be constituted to supply water for domestic purposes and stock and for irrigation. The Commission may construct or acquire the necessary works. Upon completion the works in each district are transferred to the administration of trustees consisting of persons elected by the occupiers of the land and a representative of the Commission. The trustees levy rates to meet the expenses of maintenance and administration and to repay the cost of the works by instalments.

At 30th June, 1946, there were thirteen trusts for the provision of water for domestic use and stock purposes, one for a town supply and one for flood prevention; the total area was 2,945,068 acres as shown below:—

	Number of Trusts.	Area Benefited.
		acres.
Murray River ... ..	5	339,015
Murrumbidgee River ... ..	1	1,001,210
Lachlan River ... ..	5	552,915
Darling River, Great Anabranch ... ..	1	995,200
Other ... ..	3	56,728
Total ... ..	15	2,945,068

There were, in addition to the foregoing, seven irrigation trusts, covering an area of 16,031 acres.

#### *Farm Water Supplies Act, 1946.*

The Farm Water Supplies Act, 1946, which came into operation on 9th August, 1946, provides that advances up to 90 per cent. of the cost of approved works may be made to owners of farm lands to provide or improve

water supplies for domestic, stock or irrigation purposes, and to prepare land for irrigation. The advances, made through the Irrigation Agency of the Rural Bank, are secured by deeds of charge over the land and are repayable by half-yearly instalments over periods up to fifteen years.

The works may be carried out by the farmer, by a contractor or by the Commission, and the latter may make surveys and investigations and prepare designs and estimates for proposed works and undertake works financed by farmers themselves.

Where required by the Water Act a license or authority must be obtained before the work is begun. Works constructed with government assistance must be maintained to the Commission's satisfaction.

#### *Licenses and Permits for Water Works.*

The Water Conservation and Irrigation Commission may issue licenses to authorise landholders to divert water from rivers or lakes for the irrigation of their holdings or for joint water supply schemes.

Under the Water Act as amended in 1946 licenses may be refused where proposed works or their purposes are deemed unsatisfactory, cancelled if not exercised for three years, suspended for non-observance of conditions thereof, and treated as lapsed if the works authorised are not constructed within the time prescribed. Under a license the maximum area and quantity of river water which may be taken for irrigation may be fixed. The same amendment empowers the Commission to determine priority of right (based on past beneficial use) to the taking of water in times of shortage, gives non-riparian landholders the right to apply for licenses, and provides for the granting of authorities for construction and use of joint water supply schemes.

During 1945-46 applications for 577 new licenses and 637 for renewal of existing licenses for pumps, dams and other works were received, and 606 new licenses and 534 renewals were issued. On 30th June, 1946, there were 3,906 licenses in force, the usual term being five years. Of these 2,777 were for irrigation to serve an aggregate area of 137,758 acres.

Permits which are intended for works for mining and other purposes of a temporary nature, and for irrigation of areas not exceeding 10 acres, have a term up to twelve months, and may be renewed for a further year. Permits in force at 30th June, 1946 were 99.

One authority for a joint water supply scheme to serve land subdivided with right to a supply of water for irrigation purposes covering an area of 1,500 acres was in force at 30th June, 1946.

#### ARTESIAN BORES.

The portion of the great Australian artesian basin which extends into New South Wales covers approximately 80,000 square miles and is situated in the northern and north-western hinterland of the State. The watering of the north-western country by means of bore-water has increased the carrying capacity of the land, and has made practicable some pastoral settlement on small holdings previously utilised by companies holding extensive areas.

Large supplies of water are obtained from the artesian basin, and eighty Bore Water Trusts and twelve Artesian Wells Districts, covering nearly

5,000,000 acres, are in operation under the Water Act. The Bore Trusts are administered by trustees in the same way as the Water Trusts described above. In the Artesian Wells Districts the settlers maintain the drains and pay to the State charges assessed by the Local Land Board.

The Water Conservation and Irrigation Commission exercises general control over the use of artesian water with the object of preserving the efficiency of the bores and preventing waste. The Commission may sink artesian bores, improve the supply from existing wells, and construct drains, etc. for the benefit of landholders, and may issue licences under the Water Act for the construction of bores by private owners.

At 30th June, 1946, 860 artesian bores had been sunk; 523 were flowing, giving an approximate aggregate discharge of 64,511,361 gallons per day; 283 bores were yielding a pumping supply; the balance (54) were failures. The total depth bored was 1,279,918 feet.

The following statement shows the particulars of the Government and private bores in operation at 30th June, 1946:—

TABLE 451.—Artesian Bores, 1946.

Bores.	Flowing.	Pumping.	Total.	Total Depth.
				feet.
For Public Watering-places, Trust Bores, etc. ...	146	56	202	429,005
For Country Towns Water Supply ... ..	3	1	4	6,533
For Improvement Leases ... ..	15	10	25	35,870
Total, Government Bores...	164	67	231	471,408
Private Bores ... ..	359	216	575	745,956

The average depth of successful Government bores at 30th June, 1946 was 2,041 feet, and of successful private bores 1,297 feet; the depth ranges from 89 feet to 4,570 feet.

The deepest bores in New South Wales are in the Moree district. One at Boronga has the greatest depth (4,570 feet) and outflow (1,115,360 gallons per day); another at Kiga has a depth of 4,268 feet. The Yerranbah bore, in the same district, has a depth of 3,828 feet.

Bore water shows considerable variation in temperature, ranging from 72 degrees Fah. at Tunderbrine No. 1 Bore to 142 degrees Fah. at Wonga No. 1 Bore.

The flow from 92 bores is used for supplying water for stock on holdings served in connection with bore-water trusts and artesian well districts. The total flow from these bores amounts to 25,369,982 gallons per day, watering districts of an area of 4,912,475 acres by means of 3,254 miles of distributing channels. The average rating of the bore trusts is 1.44d. per acre, including the cost of maintenance and administration.

The majority of the other bores is used by pastoralists for stock-watering only, but in a few instances the supply is utilised in connection with country towns.

The flow of artesian water is decreasing and it has been determined that the multiplicity of bores is a major cause of the decrease and that the limitation of the discharge of water from a bore will prolong its

existence. Investigations are being made into the question of making better use of the flow or supplementing it by surface water from head storages.

#### SHALLOW BORING.

Arrangements were made by the Government in 1912 to assist settlers by sinking shallow bores. The scheme is administered by the Water Conservation and Irrigation Commission. The settler selects the site, and the Commission supplies the plant, materials and labour, and the cost is repaid by the settler on terms.

Up to 30th June, 1946, the number of bores sunk by the Commission was 3,909, of which 645 were failures and 154 were only partially successful. The total depth of shallow bores was 1,144,029 feet, the average depth being 292 feet. The aggregate cost of sinking these bores was £1,092,024 approximately.

Licenses under the Water Act must be obtained by private contractors for the sinking of bores to a depth of 100 feet or more in that part of the State west of direct lines drawn from Albury to Tamworth, Tamworth to Bingara, Bingara to Inverell, and Inverell to Bonshaw.

The number of licenses issued up to the 30th June, 1946, was 2,098.

#### GROWTH OF ARTESIAN AND SHALLOW BORING.

The number of successful bores of all kinds (exclusive of those sunk by private contract of which the Water Conservation and Irrigation Commission has no record) increased from 458 in 1911 to 3,916 at 30th June, 1946.

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## PASTORAL INDUSTRY.

THE climate, terrain and vegetation of New South Wales are pre-eminently suited for pastoral pursuits and early economic progress of the State was closely identified with the development of the pastoral industry. Extensive agricultural and dairying industries also have arisen, but the pastoral industries remain the greatest of the primary industries, having contributed more than 40 per cent. of the total value of primary production during the last ten years.

Some indication of the geographical distribution of the pastoral lands of New South Wales is given in succeeding pages and in the chapter "Rural Industries". The area of holdings used for grazing is approximately 156,000,000 acres, representing about 90 per cent. of the area used for the principal forms of rural activity within the State. Sheep grazing is the outstanding pastoral pursuit and is the principal rural enterprise on the slopes and plains west of the mountains; but cattle raising also is important, both for dairying and slaughtering in the coastal belt and for slaughtering in the tablelands and slopes and central plains. The distribution of sheep, dairy cattle and "other" cattle throughout the State is indicated in the diagrammatic map published on page 9 of this Year Book.

### LIVE STOCK.

New South Wales does not possess any indigenous animals which would give rise to a large industry, and of those introduced, sheep only have developed into a prolific source of wealth in the hinterland. Indeed, the development of the sheep industries has been so remarkable that it has in a sense, precluded the rise of other pastoral activities. Horses have been bred principally for their utility in various industries and for racing purposes, but horsebreeding has declined in recent years. For many years cattle were produced only to supply local requirements of meat and dairy produce, but later an export trade was established, and considerable expansion took place in the number of cattle depastured. Pigs are bred principally in conjunction with the dairying industry, and the number does not fully meet local requirements.

### *Importation of Stud Stock.*

Before the war (1939-45) the importation of pedigree stock was assisted by subsidy provided in equal shares by the Commonwealth and State Governments and the Commonwealth Bank, and by greatly reduced freight rates accorded by United Kingdom shipping companies. The scheme was suspended early in 1940 and was revived and extended on 1st May, 1946.

It covers stud beef and dairy cattle from the United Kingdom, Canada and the United States of America, Zebu cattle from the United States, sheep, draught horses and milch goats from the United Kingdom, and pigs from the United Kingdom and Canada. The rates of subsidy per head were increased to £100 for cattle and draught horses, £50 for pigs, and £40 for sheep and milch goats. A delegation nominated by the New South Wales Government, comprising officers of the Department of Agriculture and representatives of breeders of dairy cattle and British breeds of sheep, visited the countries named late in 1946 to purchase stud stock for Government Experiment Farms and on behalf of stock-breeders.

The following table shows the number of horses, cattle, sheep and pigs in New South Wales at decennial intervals from 1861 to 1921, and at the end of each season since 1921:—

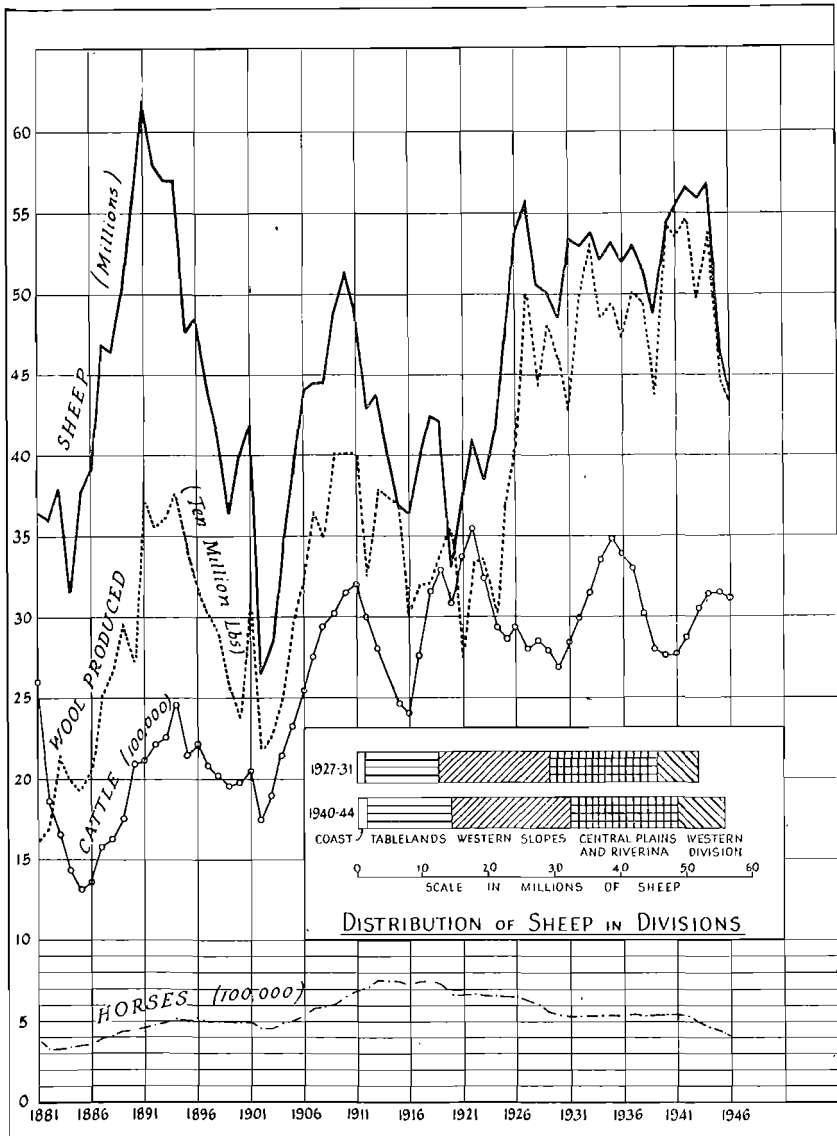
TABLE 452.—Live Stock in New South Wales, 1861 to 1946.

Year.*	Horses.	Cattle.	Sheep.	Pigs.
1861 ... ..	233,220	2,271,923	5,615,000	146,091
1871 ... ..	304,100	2,014,888	16,279,000	213,193
1881 ... ..	398,577	2,597,348	36,592,000	213,916
1891 ... ..	469,647	2,128,838	61,831,000	253,189
1901 ... ..	586,716	2,047,454	41,857,000	265,730
1911 ... ..	689,004	3,194,236	48,830,000	371,093
1921 ... ..	663,178	3,375,267	37,750,000	306,253
1922 ... ..	669,800	3,546,530	41,070,000	383,669
1923 ... ..	660,031	3,251,180	38,760,000	340,853
1924 ... ..	658,372	2,938,522	41,440,000	323,196
1925 ... ..	647,503	2,876,254	47,100,000	339,669
1926 ... ..	651,035	2,937,130	53,860,000	382,674
1927 ... ..	623,392	2,818,653	55,930,000	332,921
1928 ... ..	598,377	2,848,654	50,510,000	301,819
1929 ... ..	567,371	2,784,615	50,185,000	311,605
1930 ... ..	534,945	2,686,132	48,720,000	323,499
1931 ... ..	524,512	2,840,473	53,366,000	334,331
1932 ... ..	524,751	2,993,586	52,986,000	385,846
1933 ... ..	528,943	3,141,174	53,698,000	388,273
1934 ... ..	532,028	3,361,771	52,104,000	367,116
1935 ... ..	534,853	3,482,831	53,327,000	397,535
1936 ... ..	542,862	3,388,538	51,936,000	436,944
1937 ... ..	545,829	3,288,169	53,166,000	390,870
1938 ... ..	528,625	3,019,581	51,563,000	356,765
1939 ... ..	531,355	2,811,884	48,877,000	377,344
1940 ... ..	534,837	2,762,653	54,372,000	451,064
1941 ... ..	531,776	2,769,061	55,568,000	507,738
1942 ... ..	525,697	2,878,450	56,738,000	454,102
1943 ... ..	483,277	3,030,546	56,044,000	486,960
1944 ... ..	465,672	3,143,378	56,837,000	561,294
1945 ... ..	436,443	3,144,701	46,662,000	523,917
1946 ... ..	403,645	3,116,834	44,076,000	432,612

\* As at 31st December 1861 to 1911; 30th June, 1921 to 1931; and 31st March in 1932 and later years.

Particulars of other live stock are shown on a later page.

**LIVESTOCK AND PRODUCTION OF WOOL  
IN NEW SOUTH WALES,  
1880-81 to 1945-46.**



The numbers at side of graph represent 1,000,000 sheep, and 100,000 horses and cattle at end of season, and 10,000,000 lb. of wool produced.

To obtain an idea of the fluctuations of pastoral pursuits in the State as represented by the number of live stock grazed it is necessary to express the various species in common terms. This cannot be done with exactitude, but adopting the arbitrary equivalent of ten sheep to each head of large stock, the following comparison is obtained (omitting pigs):—

TABLE 453.—Stock—Sheep Equivalent, 1861 to 1946.

Year.*	Equivalent in Sheep of Live Stock grazed.	Year.*	Equivalent in Sheep of Live Stock grazed.
1861	30,666,000	1935	93,504,000
1871	39,469,000	1936	91,250,000
1881	66,551,000	1937	91,506,000
1891	87,816,000	1938	87,045,000
1901	67,199,000	1939	82,309,000
1911	87,662,000	1940	87,347,000
1921	78,134,000	1941	88,576,000
1927	90,350,000	1942	90,779,000
1931	87,016,000	1943	91,182,000
1932	88,169,000	1944	92,928,000
1933	90,399,000	1945	82,473,000
1934	91,042,000	1946	79,281,000

\* As at 31st December, 1861 to 1911; 30th June, 1921 to 1931; and 31st March in 1932 and later years.

The increase in flocks and herds up to 1891 was due to development of idle and partly used lands and was based mainly on sheep grazing. It has been held that in 1891 the State was overstocked having regard to the scanty pastoral improvements on holdings in the hinterland. The influence of seasonal conditions is shown in the fluctuations after 1891. The sheep equivalent of live stock grazed reached its lowest point (48,560,000) in 1902 at the culmination of the most severe drought on record and was 70,620,000 at the culmination of another severe drought in 1920. In the latter year, however, there was a proportionately larger number of cattle grazed (3,084,000 as compared with 1,741,000 in 1902).

Relatively good seasonal conditions prevailed for several years after 1930. The number of sheep exceeded 52,000,000 and there was increase in cattle. The sheep equivalent reached a peak of 93,504,000 in March, 1935, then trended downwards until drought in 1938-39 caused a decline to 82,309,000. Sheep flocks were restored in the following year and later rose above former level. The number of cattle increased after 1941 and the sheep equivalent in March, 1944, was nearly as high as in 1935. There was severe drought in southern sheep districts in 1944-45 and the sheep equivalent of flocks and herds in March, 1945, was little higher than in 1939. Drought conditions continued until June, 1945, and the sheep equivalent in March, 1946, was the lowest since 1924.



*Comparison—Live Stock in the Commonwealth.*

A comparison of the number of horses, cattle, sheep, and pigs in New South Wales and in the other States of the Commonwealth is shown in the following table:—

TABLE 454.—Live Stock in each State of the Commonwealth,  
31st March, 1946.

State.	Horses.	Cattle.	Sheep.	Pigs.
New South Wales ... ..	403,645	3,116,834	44,076,000	432,412
Victoria ... ..	232,473	1,827,087	14,655,277	271,887
Queensland ... ..	367,357	6,538,067	18,943,762	415,411
South Australia ... ..	115,949	374,096	6,786,538	119,986
Western Australia ... ..	88,180	833,567	9,765,983	137,872
Tasmania ... ..	24,863	216,306	1,025,604	46,915
Northern Territory ... ..	31,883	960,039	18,561	407
Australian Capital Territory ... ..	1,048	7,867	224,680	619
Total, Australia ... ..	1,265,398	13,873,863	96,396,405	1,425,509
Proportion per cent. in N.S.W. ... ..	31·9	22·5	45·7	30·3

In New South Wales there are more sheep, horses and pigs than in any other State in the Commonwealth, but Queensland has more cattle.

*Distribution of Live Stock.*

The following table indicates the distribution of flocks and herds in New South Wales. It shows the number of live stock, and the number per square mile, in each division at intervals since 1891.

TABLE 455.—Live Stock in Divisions, 1891 to 1946.

Division.	Number of Live Stock (000 omitted).					Number per square mile.				
	1891.	1911.	1931.†	1941.§	1946.§	1891.	1911.	1931.†	1941.§	1946.§
<b>Sheep—</b>										
Coastal Belt ... ..	1,483	1,559	1,159	1,277	1,077	42·5	44·9	33·3	36·7	31·0
Tableland ... ..	7,882	9,735	11,304	12,879	11,470	195·3	235·2	280·0	318·9	283·8
Western Slopes ... ..	10,869	12,167	17,270	17,579	14,815	286·8	275·2	392·4	399·2	336·7
C'I Plains & Riverina ... ..	25,194	17,433	16,910	16,328	12,745	351·8	269·4	261·3	252·4	197·0
Western Division ... ..	16,403	7,936	6,723	7,505	3,969	130·6	63·2	53·6	59·8	31·7
Whole State ... ..	61,831	48,830	53,366	55,568	44,076	199·2	157·3	172·4	179·6	142·5
<b>Cattle, Dairying—</b>										
Coastal Belt ... ..	197	653	901	941	923	5·6	18·7	25·9	27·0	26·5
Tableland ... ..	67	107	44	39	37	1·7	2·7	1·1	1·0	0·9
Western Slopes ... ..	37	78	51	61	50	1·0	2·1	1·1	1·4	1·1
C'I Plains & Riverina ... ..	35	48	9	13	10	0·5	0·7	0·1	0·2	0·2
Western Division ... ..	7	9	1	1	1	0·1	0·1	0·0	0·0	0·0
Whole State ... ..	343*	895	1,006†	1,055†	1,021†	1·1	2·9	3·3	3·4	3·3
<b>Cattle, Other—</b>										
Coastal Belt ... ..	640	915	736	682	806	18·3	26·2	21·1	19·6	23·2
Tableland ... ..	465	550	404	393	494	11·5	13·6	10·0	9·7	12·2
Western Slopes ... ..	247	422	397	370	484	6·5	11·1	9·0	8·4	11·0
C'I Plains & Riverina ... ..	339	302	234	208	267	4·7	4·2	3·6	3·2	4·1
Western Division ... ..	94	110	63	61	45	0·7	0·9	0·5	0·5	0·4
Whole State ... ..	1,785	2,290	1,834	1,714	2,006	5·8	7·4	5·9	5·5	6·8
<b>Horses—</b>										
Coastal Belt ... ..	163	207	144	151	134	4·7	5·9	4·1	4·3	3·9
Tableland ... ..	92	127	86	91	74	2·3	3·1	2·1	2·3	1·8
Western Slopes ... ..	76	180	159	150	104	2·0	4·8	3·6	3·4	2·4
C'I Plains & Riverina ... ..	95	140	112	113	75	1·3	2·0	1·7	1·7	1·2
Western Division ... ..	44	35	23	27	17	0·4	0·3	0·2	0·2	0·1
Whole State ... ..	470	689	524	532	404	1·5	2·2	1·7	1·7	1·3

\* Cows in milk only; dry cows and springing heifers are included in the total of Other Cattle.

† Cows in registered dairies only.

‡ At 30th June.

§ At 31st March.

Sheep are depastured principally in the hinterland of the State, and are usually most numerous in the Western Slopes Division. Cattle are most numerous in the coastal areas, and horses in the Coastal and Western Slopes Divisions.

Since 1922 statistics of livestock have been compiled in local government areas, and not in counties as formerly. The change in geographical basis involved considerable alteration in the areas comprising divisions of the Western Slopes and the Central Plains, where large numbers of stock are depastured. Therefore the divisional figures in the foregoing table for 1931 and later years are not strictly comparable with those for 1891 and 1911.

*Improvement of Pastures and Fodder Conservation.*

Information regarding the improvement of pastures by fertilising the land and cultivating suitable grasses and herbage is shown in the chapter "Rural Industries", on page 398 *et seq.*

SHEEP.

The following table shows the number of sheep at the end of each quinquennial period from 1861 to 1936 and at the end of later seasons; also the average rate of increase or decrease in each period.

TABLE 456.—Number of Sheep, 1861 to 1946.

Year. *	Sheep.	Average Annual Rate of Increase.	Year. *	Sheep.	Average Annual Rate of Increase.	Year. *	Sheep.	Average Annual Rate of Increase.
		Per cent.			Per cent.			Per cent.
1861	5,615,000	...	1901	41,857,000	(-) 2.8	1939	48,877,000	(-) 5.2
1866	11,562,000	(+) 15.5	1906	44,132,000	(+) 1.1	1940	54,372,000	(+) 11.2
1871	16,278,000	(+) 7.1	1911	48,830,000	(+) 2.0	1941	55,568,000	(+) 2.2
1876	25,269,000	(+) 9.2	1916	36,490,000	(-) 5.6	1942	56,738,000	(+) 2.1
1881	36,591,000	(+) 7.7	1921	37,750,000	(+) 0.7	1943	56,044,000	(-) 1.2
1886	39,169,000	(+) 1.4	1926	53,860,000	(+) 7.4	1944	56,837,000	(+) 1.4
1891	61,831,000	(+) 9.6	1931	53,366,000	(-) 0.2	1945	46,662,000	(-) 17.9
1896	48,318,000	(-) 4.8	1936	51,936,000	(-) 0.5	1946	44,076,000	(-) 6.5

\* At 31st December, 1861 to 1911; 30th June, 1916 to 1931; and at 31st March later years.

(-) Denotes decrease.

The number of sheep was greatest in 1891, and thereafter lowest at the end of 1902 by reason of drought. The main cause of the reduction in the number of sheep between 1891 and 1921 seems to have been a remarkable deterioration of seasons. The weighted average annual rainfall of the State was about  $3\frac{1}{2}$  inches less in the twenty years which followed 1894 than in the preceding quarter of a century, and this decline was proportionally heaviest in the plain districts of low average rainfall, which in 1891 carried two-thirds of the sheep depastured in the State. The rabbit pest, too, aggravated the effects of dry weather through destruction of natural herbage, and the expansion of the agricultural industry caused land to be diverted from the purpose of sheep-breeding.

During later years the grazing capacity of the pastoral lands was improved by increased conservation of water, control of the rabbit pest, fertilising of pastures and cultivation of grasses, and better facilities for transfer of stock from localities where seasonal conditions become unfavourable. Between 1923 and 1926 the number of sheep rose by 15 millions and remained above 50 millions (except in 1930 and 1939) until March, 1944, when the number, 56,837,000, was the highest since 1894. The weighted average

annual rainfall in sheep districts was below normal in every year from 1939-40 to 1945-46, whereas in the intervening years since 1920-21 the longest succession of years of below normal rainfall was three in 1921-22 to 1923-24. Severe losses were experienced in 1944-45 and 1945-46, and the number in March, 1946 (44,076,000), was the lowest since 1924.

The following table shows as nearly as may be the extent of each of the principal factors in the increase and decrease in the number of sheep since March, 1934. Figures for the years since 1915-16 were published in earlier issues of the Official Year Book.

TABLE 457.—Sheep—Lambing, Exports, Deaths, 1936 to 1946.

Season.	Lambs Marked.	Sheep and Lambs Slaughtered.	Excess of Imports (+) or Exports (—)	Estimated number of Deaths* (Balance).	Net Increase (+) or Decrease (—)	Sheep at 31st March.
Thousands (000) omitted.						
1935-36	11,338	6,037	(—) 1,391	5,301	(—) 1,391	51,936
1936-37	14,331	6,417	(—) 1,207	5,477	(+) 1,230	53,166
1937-38	13,045	6,860	(—) 2,332	5,456	(—) 1,603	51,563
1938-39	9,286	6,311	(+) 230	5,891	(—) 2,686	48,877
1939-40	15,674	6,887	(—) 44	3,248	(+) 5,495	54,372
1940-41	14,015	8,168	(—) 664	3,987	(+) 1,196	55,568
1941-42	14,616	8,128	(—) 1,432	3,886	(+) 1,170	56,738
1942-43	13,627	9,299	(—) 772	4,251	(—) 694	56,044
1943-44	15,068	9,476	(—) 798	4,000	(+) 793	56,837
1944-45	11,069	8,865	(—) 1,009	11,370	(—) 10,175	46,662
1945-46	9,894	7,601	(+) 393	5,272	(—) 2,586	44,076

\* The figures in this column represent a balance and are rough approximations.

The effect of adverse seasons on the sheep flocks is apparent in four directions, viz., losses by death attributable mainly to lack of fodder and water, increase in the slaughtering of fat stock, decrease in lambing, and increased export to other States.

The decrease in sheep in the adverse seasons 1937-38 and 1938-39 was more than regained in 1939-40 when mortality was low and lambing was a record. In following years low mortality and good lambing results enabled some further increase in flocks notwithstanding much heavier slaughtering, and in each season 1941-42 to 1943-44 the number of sheep exceeded 56,000,000. Then severe drought supervened and in the two seasons ended March, 1946, deaths of sheep on holdings (estimated as 16,642,000) were about 8,500,000 above the normal experience; the number of lambs marked (20,963,000) was nearly 4,120,000 per year fewer than the average in the quinquennium ended 1943-44, and slaughterings, though less than in the preceding seasons, were at a high level. Lambing was at its lowest level in 1945-46 when there was a net import of sheep for the first time since 1938-39. At 31st March, 1946, sheep numbered 44,076,000; a decrease of 12,761,000 or of 22.5 per cent. during the two seasons 1944-45 and 1945-46.

#### *Interstate Movement of Sheep.*

Apart from the seasonal movement of stock to and from agistment in other States, there is a regular export of sheep from New South Wales to Victoria. During the five years ending June, 1946, 7,029,000 sheep were moved from New South Wales to Victoria, and 1,498,000 from Victoria to New South Wales, leaving an excess of exports to Victoria of 5,531,000. In

the same period, 3,944,000 sheep were imported from Queensland to New South Wales and 1,306,000 were exported from New South Wales to Queensland, leaving an excess of imports of 2,638,000 from Queensland to New South Wales. The excess of exports to other destinations during the same period was 687,000, chiefly to South Australia, and the total excess of exports of live sheep from New South Wales during the five years was 3,580,000, consisting mainly of sheep sent to market in Victoria from the southern districts of New South Wales.

The following table shows the movement of sheep from and to New South Wales, so far as is recorded, in 1936-37 and later seasons:—

TABLE 458.—Sheep—Exports and Imports—Interstate, 1936-37 to 1945-46.

Year ended 30th June.	Sheep from New South Wales.				Sheep to New South Wales.				Excess of Exports.
	To Victoria.	To Queensland.	To South Australia and by Sea.	Total.	From Victoria.	From Queensland.	From South Australia and by Sea.	Total.	
1937 ...	000	000	000	000	000	000	000	000	000
1937 ...	1,877	665	127	2,669	478	712	20	1,210	1,459
1938 ...	2,207	745	350	3,302	469	541	16	1,026	2,276
1939 ...	1,054	446	84	1,534	919	1,339	66	2,324	(-) 790
1940 ...	1,837	384	106	2,327	460	1,631	21	2,112	215
1941 ...	1,624	343	111	2,078	599	621	31	1,251	827
1942 ...	1,718	370	221	2,309	368	320	33	721	1,588
1943 ...	1,527	169	351	2,047	264	1,203	12	1,479	568
1944 ...	1,447	280	161	1,894	326	671	20	1,017	877
1945 ...	1,449	291	63	1,803	243	558	21	822	981
1946 ...	888	190	14	1,092	297	1,192	37	1,526	(-) 434

(-) Denotes excess of Imports.

### *Sheep—Sexes and Lambs.*

Returns supplied by landholders show the following approximate distribution of the flocks according to sex, also the number of lambs:—

TABLE 459.—Sheep.—Sexes and Lambs, 1936 to 1946.

At 31st March.			Rams.	Ewes.	Wethers.	Lambs (under 1 year).	Total.
1936	...	...	702,000	27,472,000	14,693,000	9,069,000	51,936,000
1937	...	...	701,000	26,766,000	14,243,000	11,456,000	53,166,000
1938	...	...	676,000	26,051,000	14,758,000	10,078,000	51,563,000
1939	...	...	662,000	25,940,000	14,672,000	7,603,000	48,877,000
1940	...	...	676,000	27,269,000	13,542,000	12,885,000	54,372,000
1941	...	...	721,000	29,373,000	14,296,000	11,178,000	55,568,000
1942	...	...	721,000	30,129,000	13,994,000	11,894,000	56,738,000
1943	...	...	792,000	30,290,000	13,770,000	11,192,000	56,044,000
1944	...	...	774,000	30,382,000	12,891,000	12,790,000	56,837,000
1945	...	...	659,000	25,733,000	11,452,000	8,818,000	46,662,000
1946	...	...	596,000	24,871,000	10,545,000	8,064,000	44,076,000

After severe losses in 1938-39 sheep flocks were rapidly restored. Even greater losses were experienced in 1944-45 and 1945-46 when breeding ewes were reduced by 12.2 per cent. and lambs by 37.0 per cent. The number of ewes in March, 1946, was 1,069,000 less, and of wethers 4,127,000 less than in March, 1939, but the number of lambs was greater by 461,000. Dry conditions in the sheep districts were relieved during 1945.

A classification of ewes and wethers as at 31st March, 1944 and 1945 is as follows:—

March.	Breeding Ewes.	Other Ewes.		Wethers.	
		1-4 yrs.	4 yrs. and over.	1-4 yrs.	4 yrs. and over.
1944 ... ..	25,177,000	3,216,000	1,989,000	9,294,000	3,597,000
1945 ... ..	21,105,000	2,825,000	1,803,000	8,292,000	3,160,000

Similar details are not available for 1945-46, but during that season breeding ewes increased by approximately 4.7 per cent. to 22,105,489 and other ewes decreased by 40.2 per cent. to 2,765,557.

### *Lambing.*

The greater part of the lambing of the State takes place during the autumn and winter months, although a considerable proportion of ewes, varying according to the nature of the season, is reserved for spring and early summer lambing. It is possible to breed from ewes twice per year, but it is not considered good policy and is rarely practised, except, perhaps, after severe losses. Seasonal changes play a large part in determining the proportion of ewes mated and of resultant lambs, and cause wide variations in the natural increase.

The lambing season extends almost continuously from March to November and comparatively few lambs are dropped in the months of December, January and February.

Lambing results in recent years were as follow:—

TABLE 460.—Lambing, 1936-37 to 1945-46.

Season.	Ewes Mated.	Lambs Marked.	Proportion of Lambs Marked to Ewes Mated.
			per cent.
1936-37 ... ..	21,260,400	14,330,700	67.4
1937-38 ... ..	20,481,200	13,044,600	63.7
1938-39 ... ..	17,670,700	9,285,700	52.6
1939-40 ... ..	22,231,500	15,674,200	70.5
1940-41 ... ..	21,877,600	14,014,400	64.0
1941-42 ... ..	22,263,800	14,616,300	65.9
1942-43 ... ..	21,577,500	13,626,700	63.1
1943-44 ... ..	22,188,200	15,067,600	67.9
1944-45 ... ..	18,564,600	11,068,600	59.6
1945-46 ... ..	16,942,700	9,893,700	58.4

During the ten years ended 1945-46, the ratio of lambs marked to ewes mated ranged from 52.6 per cent. in 1938-39 to 70.5 per cent. in 1939-40, and the average was 64 per cent. In each season from 1939-40 to 1943-44 the number of lambs marked was above the average. There was a decline from 15,067,600 to 11,068,600 in 1944-45, and to 9,893,700 in 1945-46, when with one exception (1938-39) the number was the lowest since 1929-30.

TABLE 461.—Lambing in Districts, 1944-45 and 1945-46.

District.	1944-45.			1945-46.		
	Ewes Mated.	Lambs Marked.	Proportion of Lambs Marked to Ewes Mated.	Ewes Mated.	Lambs Marked.	Proportion of Lambs Marked to Ewes Mated.
Coast ... ..	000 276	000 200	per cent. 72.5	000 283	000 198	per cent. 70.0
Tablelands—						
North ... ..	507	273	53.8	558	372	66.7
Central ... ..	1,904	1,256	66.0	1,800	1,287	70.4
South ... ..	1,065	670	62.9	1,032	705	68.3
Total ... ..	3,476	2,199	63.3	3,390	2,344	69.1
Western Slopes—						
North ... ..	1,905	1,215	63.8	1,887	1,266	67.1
Central ... ..	2,164	1,346	62.2	2,053	1,354	65.9
South ... ..	2,648	1,625	61.4	1,946	904	46.5
Total ... ..	6,717	4,186	62.3	5,886	3,524	59.9
Plains—						
North ... ..	1,743	970	55.6	1,847	1,157	62.6
Central ... ..	2,209	1,236	56.0	2,396	1,437	60.0
Riverina ... ..	2,777	1,706	61.4	1,889	711	37.6
Total ... ..	6,729	3,912	58.1	6,132	3,305	53.9
Western Division ... ..	1,366	572	41.9	1,252	523	41.8
Total ... ..	18,564	11,069	59.6	16,943	9,894	58.4

### *Breeds of Sheep.*

The numbers of the principal breeds in the State at 31st March, 1942, (the latest date for which this information is available) were 44,762,300 merino, 1,068,200 other pure breeds, 2,994,100 merino comebacks and 7,913,400 crossbreds; total, 56,738,000.

Merinos represented nearly 85 per cent. of the total during the years 1932 to 1939, and the proportion declined in three later seasons to 79 per cent. in March, 1942.

Sheep of other pure breeds are not numerous. British breeds of sheep, in numerical importance in 1942, were the Border Leicester 178,045, Romney Marsh 80,519, Dorset Horn 35,459, Southdown 22,250 and a small number of Suffolk, English Leicester, Lincoln, Ryeland and Shropshire.

Crosses of long-woolled breeds with the merino constitute a relatively small proportion of the sheep in New South Wales, but the number of cross-bred sheep tends to increase as greater interest is taken in fat lamb raising for export.

The Corriedale, which numbered 687,267 in 1942, is an inbred cross between the Lincoln and the merino, and is valuable as a dual purpose (wool and mutton) sheep, well suited to all but the hotter and drier areas of the State. Polwarth (of which there were 49,827 in 1942) is a breed evolved

in Victoria about 1885 and may be termed a fixed comeback, merino rams being mated to Lincoln by merino ewes and the progeny inbred. The Polwarth is considered an ideal farmers' sheep, having a better carcase than the merino and producing saleable wool of comeback type.

Stud flocks of merino and other breeds are maintained throughout the State and a register is compiled annually. Most of the flocks maintained for breeding purposes are registered. At 31st December, 1942, there were 967,600 stud sheep in the 323 registered merino flocks, viz., 139,495 rams, 568,286 ewes and 259,819 lambs. In that year 134,348 stud rams and 152,870 stud ewes were bred.

#### PRODUCTION OF WOOL.

Wool is produced in New South Wales principally by shearing the live sheep, but also to a considerable extent by fellmongering. A small quantity is picked from the carcases of dead sheep on the holding. In normal times many sheep skins are exported oversea and interstate, and the quantity of wool on these is estimated and included in the total production.

The output of wool is stated as in the grease, as data as to its clean scoured yield are not available. A small proportion of the shorn wool is scoured before being marketed, and the whole of the fellmongered wool is in a scoured condition. For the purpose of estimating the greasy equivalent of that part of the clip marketed as scoured wool, it is usual to take 2.18 lb. of greasy as equivalent to 1 lb. of scoured wool. Very little wool is washed on holdings.

The following table shows, in quinquennial periods from 1876, and annually since 1932-33, the total quantity of wool produced (as in the grease) in New South Wales, together with the aggregate value at Sydney, and the value to growers:—

TABLE 462.—Wool—Quantity and Value, 1876 to 1945-46.

Average per Season.	Wool Produced.		Season.	Wool Produced.		
	Quantity as in the Grease.	Value at Sydney.		Quantity as in the Grease.	Value at Sydney.	Value at Place of Production.
	000 lb.	£000		000 lb.	£000	£000
1876-1880 ...	143,679*	6,260	1932-33	532,080	18,845	16,659
1881-1885 ...	188,763*	8,113	1933-34	484,390	31,889	29,951
1886-1890 ...	258,956*	8,955	1934-35	494,981	19,827	18,045
1891-1895 ...	362,726*	9,805	1935-36	472,585	27,321	25,408
1896-1900 ...	281,648*	8,597	1936-37	503,616	34,106	32,091
1901-1905 ...	260,517*	9,344	1937-38	495,027	25,961	24,060
1906-1910 ...	369,321*	14,958	1938-39	437,141	18,761	17,076
1911-1915 ...	357,256	15,468	1939-40	546,273	30,586	28,283
1916-1920 ...	328,065	18,507	1940-41	536,908	29,401	27,127
1921-1925 ...	323,635	24,272	1941-42	547,000	29,823	27,458
1926-1930 ...	457,712	30,648	1942-43	497,538	31,318	29,154
1931-1935 ...	488,064	20,679	1943-44	537,410	34,179	31,703
1936-1940 ...	490,929	27,347	1944-45	448,683	28,183	26,112
1941-1945 ...	513,508	28,311	1945-46	431,549	27,157	25,234

\* Exclusive of wool exported on skins.

Since 1926 pastoral holdings have been improved and wool production, though subject to seasonal fluctuations, has been maintained at a far higher level than formerly. The quantity produced in the five seasons ended 1943-44 was greater than in any earlier quinquennium and 10.9 per cent. greater than in the five years ended 1938-39. In 1944-45 and 1945-46 production decreased owing to drought and in the latter season was the lowest since 1930-31.

Marked changes in the value of the output have been caused by fluctuations in price rather than variations in the quantity produced. The average annual value (as at place of production) exceeded £31,650,000 in the five seasons ended 1928-29. Two years later it declined to £13,705,000 and did not regain its former level for several seasons. The value, as stated for the last seven seasons, is based on the average price under the agreement with the United Kingdom Government for the purchase of the Australian clip. The course of wool prices since 1876 is shown in Table 474.

Particulars of the number of sheep shorn, the average weight of wool per sheep, and the amount of shorn and other wool produced since 1920-21, are as follows:—

TABLE 463.—Sheep Shorn and Wool Produced, 1921 to 1946.

Season.	Sheep shorn during year (including lambs).	Average clip (greasy). †	Weight of Wool Produced (as in the grease).				
			Shorn and crutched.	Dead.	Fell-mongered.	Exported on skins.	Total production.
<b>Annual Average.</b>	<b>Thousands.</b>	<b>lb.</b>	<b>Thousand lb.</b>				
1921-25 ...	38,378	7.5	286,786	925	23,599	12,325	323,635
1926-30 ...	50,944	8.2	418,405	985	18,548	19,774	457,712
1931-35 ...	53,691	8.2	438,594	1,035	34,109	14,326	488,064
1936-40 ...	54,426	8.2	445,206	1,815	26,172	17,736	490,929
1941-45 ...	56,696	8.2	463,871	1,155	41,712	6,770	513,508
<b>Year—</b>							
1930-31 ...	48,840	7.9	385,105	585	22,740	18,790	427,220
1931-32 ...	52,240	8.7	454,764	404	34,875	11,605	501,648
1932-33 ...	55,612	8.6	478,703	459	39,663	13,255	532,080
1933-34 ...	56,878	7.5	427,959	2,428	42,909	11,094	484,390
1934-35 ...	54,884	8.1	446,437	1,301	30,356	16,887	494,981
1935-36 ...	55,805	7.7	429,701	2,358	24,176	16,350	472,585
1936-37 ...	55,485	8.3	459,650	1,423	24,303	18,240	503,616
1937-38 ...	54,673	8.2	447,695	1,771	23,951	21,610	495,027
1938-39 ...	51,530	7.6	391,627	2,427	25,677	17,410	437,141
1939-40 ...	54,637	9.1	497,356	1,095	32,751	15,071	546,273
1940-41 ...	57,704	8.4	484,012	1,326	46,019	5,551	536,908
1941-42 ...	58,537	8.5	497,447	1,125	41,964	6,464	547,000
1942-43 ...	57,654	7.8	448,968	1,278	42,500	4,792	497,538
1943-44 ...	57,318	8.6	490,331	883	39,816	6,380	537,410
1944-45 ...	52,268	7.6	398,598	1,164	38,261	10,660	448,683
1945-46 ...	45,402	8.5	386,724	1,204	31,647	11,974	431,549

† Including Crutchings. Lambs shorn and lambs' wool are included in the average.

#### *Average Weight of Fleece.*

The average weight of the fleece fluctuates considerably from year to year with variations in seasonal conditions, and it is affected also by changes in the proportion of lambs shorn. The average over the last ten years was 8.0 lb. per head (sheep and lambs).



The average weight of fleece shorn from sheep and lambs in statistical divisions of New South Wales in the four years ended March, 1943 to 1946, is shown below. Crutchings, which generally represent 2 or 3 per cent. of total wool production, are not included.

TABLE 464.—Average Clip, Sheep and Lambs, 1942-43 to 1945-46.

Division.	1942-43.		1943-44.		1944-45.		1945-46.	
	Sheep.	Lambs.	Sheep.	Lambs.	Sheep.	Lambs.	Sheep.	Lambs.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Tablelands—North ...	7.95	3.06	7.76	2.93	7.10	2.79	8.29	2.63
Central ...	7.85	2.21	9.09	2.48	7.66	2.20	8.95	2.28
South ...	8.26	1.55	8.87	1.65	7.88	1.27	9.00	1.52
Total—Tablelands ...	8.00	2.09	8.69	2.27	7.59	1.99	8.81	2.08
Western Slopes—North ...	8.03	2.93	8.66	3.42	7.57	3.15	8.77	3.27
Central ...	8.02	2.65	9.69	2.94	8.14	2.65	9.39	2.84
South ...	7.92	2.32	9.12	2.81	7.26	2.21	7.55	2.30
Total—Western Slopes ...	7.98	2.58	9.12	2.98	7.58	2.57	8.46	2.82
Plains—North... ...	8.07	3.30	9.52	3.76	8.31	3.90	9.47	3.49
Central ...	8.71	3.79	10.43	2.91	9.13	3.38	10.23	3.66
Riverina ...	8.45	2.48	9.35	2.68	8.29	2.53	8.04	2.61
Total—Plains ...	8.44	3.04	9.75	2.98	8.57	3.15	9.31	3.35
Western Division ...	9.23	3.77	10.58	3.82	9.58	3.93	9.95	3.04
New South Wales ...	8.29	2.85	9.38	2.99	8.09	2.79	8.94	2.89

As the figures quoted in the preceding table relate to greasy wool, comparisons between divisions necessitate allowance for the presence in the fleece of foreign matter such as dust and burr. Generally the greasy wool from the tablelands produces the highest yield of scoured wool. The yield is lower in the Western Slopes, the Plains, Riverina, and Western Division.

During the last ten years the average weight of clip was 8.9 lb. per sheep, and 2.9 lb. per lamb. The annual averages for sheep (exclusive of lambs) in respective districts were as follows:—

TABLE 465.—Average Clip per Sheep in Divisions, 1936-37 to 1945-46.

Season.	Tablelands.	Western Slopes.	Plains.	Western Division.	Total N.S.W.
	lb.	lb.	lb.	lb.	lb.
1936-37 ...	8.6	8.7	9.1	10.5	9.0
1937-38 ...	8.5	8.4	9.2	10.2	8.9
1938-39 ...	7.6	7.4	7.8	9.5	7.8
1939-40 ...	9.3	9.7	10.4	10.4	9.9
1940-41 ...	8.8	8.8	9.3	10.1	9.1
1941-42 ...	8.8	8.8	9.3	10.2	9.1
1942-43 ...	8.0	8.0	8.4	9.2	8.3
1943-44 ...	8.7	9.1	9.8	10.6	9.4
1944-45 ...	7.6	7.6	8.6	9.6	8.1
1945-46 ...	8.8	8.5	9.3	9.9	8.9
Average 10 years	8.5	8.5	9.1	10.0	8.9

The foregoing averages are exclusive of crutchings.

## INDEX OF RAINFALL IN SHEEP DISTRICTS.

The following table shows a monthly index of rainfall in the sheep districts of New South Wales. The index represents the weighted average ratio of actual to normal rainfall in each month, the normal in each month being the average over a long period of years and represented by 100:—

TABLE 466.—Index of Rainfall in Sheep Districts, 1931 to 1946.

Season.	1931 -32.	1932 -33.	1933 -34.	1934 -35.	1935 -36.	1936 -37.	1937 -38.	1938 -39.	1939 -40.	1940 -41.	1941 -42.	1942 -43.	1943 -44.	1944 -45.	1945 -46.
<i>Spring—</i>															
Sept.	82	106	161	88	142	61	78	37	41	109	56	72	116	31	30
Oct.	46	63	131	271	128	46	96	148	121	18	75	127	90	52	85
Nov.	119	117	208	168	31	14	97	77	148	52	78	165	170	41	61
<i>Summer—</i>															
Dec.	135	54	142	76	92	200	65	9	35	123	34	129	50	37	49
Jan.	17	126	136	115	173	122	85	69	80	319	34	141	45	114	151
Feb.	91	274	87	161	101	70	72	149	34	78	147	52	58	123	195
<i>Autumn—</i>															
March	152	44	22	21	146	124	17	251	46	152	74	15	41	31	79
April	157	86	106	143	55	33	67	214	204	16	27	133	61	87	65
May	57	86	15	28	69	42	119	53	33	58	196	124	127	105	42
<i>Winter—</i>															
June	59	69	74	30	84	71	72	104	17	95	118	51	16	181	49
July	85	150	165	103	197	36	99	71	21	47	149	67	70	95	55
Aug.	101	51	136	59	98	113	161	200	36	37	72	105	142	144	26
Spring	82	115	167	176	100	40	89	87	103	60	70	121	125	41	59
Summer	81	66	184	93	142	131	74	76	33	173	72	107	51	91	132
Autumn	122	72	48	64	90	66	68	173	94	75	99	91	70	74	62
Winter	82	92	125	64	126	73	107	125	25	60	113	74	76	140	43
Year ended August.	92	86	131	99	115	77	85	115	64	92	88	98	82	87	74

Average Clip per Sheep (lb.)\*

Season	8·7	8·6	7·5	8·1	7·7	8·3	8·2	7·6	9·1	8·4	8·5	7·8	8·6	7·6	8·5
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\* Sheep and lambs, crutchings included.

Comparison of rainfall with the average clip per sheep shorn in the succeeding season, as shown at the foot of the foregoing table, clearly indicates that there is a close relationship between rainfall and the weight of the fleece, years of poor rainfall almost invariably resulting in a decline in the quantity of wool shorn per sheep. Whilst satisfactory seasonal conditions throughout the year are needed for good results, summer and autumn rains exercise a considerable influence upon wool production. This influence is illustrated by reference to 1936-37, 1940-41 and 1944-45. Although rainfall over the whole season in each of those years was below normal, good rains fell in summer and autumn and the average weight of fleece shorn in the next succeeding years was relatively high.

The low average weight per fleece in 1938-39 was the result of two dry years. Rainfall was above normal in several months of 1939, and the average clip in 1939-40 was a record. Fleeces were light in 1944-45, due to the very dry summer and autumn of 1943-44, but satisfactory late summer and late autumn rains fell in 1944-45 and nearly a pound more wool per sheep was produced in 1945-46 than in 1944-45.

## ZONE SYSTEM FOR SHEARING SHEEP.

The war-time zonal system of shearing ended in March, 1946. Particulars of the zoning arrangements are published in the chapter "Employment" of this volume.

## WOOL MARKETING.

For many years the whole of the wool grown in New South Wales was shipped for sale in London. As the number of continental buyers increased, however, there developed a tendency to seek supplies of the raw material at their source, and after the year 1885 local wool sales began to assume importance. The proportion of the clip shipped oversea before sale rarely reaches 1 per cent. The quantities so shipped from New South Wales in each season from 1927-28 to 1938-39, as recorded by the Wool Selling Brokers' Association, were as follow:—

	Bales.		Bales.		Bales.
1927-28 ...	8,984	1931-32 ...	9,153	1935-36 ...	10,346
1928-29 ...	9,302	1932-33 ...	10,061	1936-37 ...	7,770
1929-30 ...	8,839	1933-34 ...	10,107	1937-38 ...	6,775
1930-31 ...	12,487	1934-35 ...	9,436	1938-39 ...	3,982

*Sydney Wool Sales.*

Sydney is the largest primary wool market in the world. Wool sales usually commence about September and continue in series on fixed dates over a period of eight or nine months. The sales are attended by representatives of firms from practically every country in which woollen goods are manufactured extensively. Sales by auction were suspended during the war years (1939-45) and were resumed in Sydney on 2nd September, 1946. The Australian wool clips of 1939-40 to 1945-46 were sold under the appraisement system of the United Kingdom war-time purchase agreements.

Figures are compiled by the National Council of Wool Selling Brokers of Australia showing the quantity of wool of each season's clip received into store and the disposal of that wool during the season. The particulars for wool stores in the Sydney centre for each of the last twenty years are given in the next table, which shows that it is exceptional for a significant proportion of the wool received not to be sold during the year in which it reaches the stores. In this period the proportion ranged from 0.5 per cent. in 1940-41 to 11 per cent. in 1937-38, and was about 2.9 per cent. over the ten years ended 1936-37.

TABLE 467.—Sydney Wool Stores—Receipt and Disposal of Wool,  
1926-27 to 1945-46.

Season.	Current (Greasy and Scoured) Season's Wool.			Season.	Current (Greasy and Scoured) Season's Wool.		
	Received into Store.	Sold during Season.*	Carried Over at end of Season.		Received into Store.	Sold during Season.*	Carried Over at end of Season.
	bales.	bales.	bales.		bales.	bales.	bales.
1926-27 ...	1,146,518	1,126,790	11,627	1936-37 ...	1,251,438	1,214,790	28,878
1927-28 ...	1,073,341	1,052,404	11,953	1937-38 ...	1,208,368	1,068,079	133,534
1928-29 ...	1,164,638	1,139,966	15,370	1938-39 ...	1,078,107	1,020,891	53,234
1929-30 ...	1,109,501	1,082,779	17,883	1939-40 ...	1,345,734	1,336,151	7,583
1930-31 ...	1,057,363	1,021,600	23,276	1940-41 ...	1,271,709	1,264,993	6,024
1931-32 ...	1,224,974	1,154,660	61,161	1941-42 ...	1,263,677	1,228,264	35,833
1932-33 ...	1,246,687	1,214,724	21,902	1942-43 ...	1,071,702	1,043,799	27,641
1933-34 ...	1,135,575	1,060,663	64,805	1943-44 ...	1,134,159	1,089,410	44,421
1934-35 ...	1,208,584	1,155,892	43,256	1944-45 ...	917,877	902,849	14,462
1935-36 ...	1,198,444	1,155,251†	32,847	1945-46 ...	925,809	913,651	12,158

\* By auction, private treaty, or, in 1939-40 to 1945-46, under appraisement system.

† Includes 21,377 bales destroyed by fire.

It is to be noted that the foregoing statement does not supply particulars regarding the subsequent disposal of wool carried over from one season to the next, and therefore, does not cover all wool sold by brokers in Sydney as shown in the next table.

The following statement compiled from the records of the Sydney Wool Selling Brokers' Association shows particulars of Sydney wool sales since 1921-22. The information for 1939-40 and later seasons relates to wool appraised at Sydney centre and the appraised value thereof (excluding additional payments for adjustment to United Kingdom contract value; see page 519).

TABLE 468.—Sydney Wool Sales.

Season.	Wool Sold.		Proportion of Wool of each Description Sold.						Average weight per Bale.	
	Weight as in grease.	Value.	Breed.		Growth.		Condition.		Greasy.	Scoured †
			Merino.	Cross-bred.	Fleece, etc.	Lambs.	Greasy.	Scoured.		
	lb.000	£000	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	lb.	lb.
1921-22	313,886	14,765	73.2	26.8	95.7	4.3	90.7	9.3	330	240
1922-23	268,873	18,922	79.0	21.0	94.3	5.7	93.3	6.7	321	234
1923-24	224,719	21,445	83.9	16.1	96.6	3.4	92.6	7.4	318	228
1924-25	212,064	22,624	85.9	14.1	94.7	5.3	95.1	4.9	327	232
1925-26	345,685	23,776	86.6	13.4	93.7	6.3	95.2	4.8	315	227
1926-27	374,925	26,377	87.9	12.1	94.9	5.1	94.1	5.9	322	208
1927-28	338,476	26,885	90.8	9.7	95.3	4.7	93.7	6.3	306	226
1928-29	356,096	25,113	88.6	11.4	96.0	4.0	95.0	4.1	313	236
1929-30	342,084	14,888	90.1	9.9	95.5	4.5	95.7	4.3	305	231
1930-31	331,476	11,743	90.1	9.9	96.5	3.5	94.9	5.1	309	225
1931-32	378,006	12,727	90.0	10.0	94.5	5.5	94.0	6.0	308	230
1932-33	417,443	14,358	90.1	9.9	94.0	6.0	91.8	8.2	311	236
1933-34	347,587	21,974	90.0	10.0	95.4	4.6	91.5	8.5	304	237
1934-35	387,531	15,359	90.3	9.7	95.2	4.8	93.7	6.3	307	230
1935-36	364,656	20,517	90.4	9.6	95.1	4.9	92.8	7.2	296	230
1936-37	388,181	25,980	91.1	8.9	95.3	4.7	94.6	5.4	300	235
1937-38	336,346	17,621	91.3	8.7	95.6	4.4	95.3	4.7	298	228
1938-39	357,049	15,078	90.9	9.1	97.0	3.0	94.9	5.1	302	233
1939-40	444,651	23,018	89.1	10.9	94.8	5.2	93.2	6.8	312	233
1940-41	403,859	19,851*	88.2	11.8	94.8	5.2	90.9	9.1	307	224
1941-42	398,860	19,781*	86.0	14.0	95.6	4.4	90.7	9.3	310	223
1942-43	355,038	19,940*	86.5	13.5	95.8	4.2	89.1	10.9	320	227
1943-44	367,699	20,669*	85.3	14.7	94.2	5.8	92.0	8.0	314	227
1944-45	300,756	16,574*	83.4	16.6	95.0	5.0	90.5	9.5	305	226
1945-46	303,365	16,505*	83.7	16.3	95.9	4.1	90.1	9.9	317	217

\* See paragraph preceding table.

† Including skin wool.

The figures as to quantity and value in Table 468 are not comparable with records of production, because considerable quantities of wool grown in New South Wales have been sold in other States, notably in Victoria and South Australia, while small quantities of wool from the other States, mainly from Queensland, were marketed in Sydney. Part of the wool of New South Wales was sold at Albury and, in recent years, at Newcastle.

In addition, wool has been appraised at Goulburn since 1939-40. The quantities and value of wool appraised at Newcastle and Goulburn in the seasons 1939-40 to 1945-46 are given below:—

TABLE 469.—Appraisement of Wool, Newcastle and Goulburn.

Season.	Newcastle.		Goulburn.	
	Weight (As in grease.)	Appraised Value.	Weight. (As in grease.)	Appraised. Value.
	lb. 000.	£000.	lb. 000.	£000.
1939-40 ... ..	11,211	604	4,541	271
1940-41 ... ..	23,241	1,180	5,027	288
1941-42 ... ..	37,606	1,909	6,670	383
1942-43 ... ..	55,222	3,241	9,048	600
1943-44 ... ..	59,399	3,468	13,272	875
1944-45 ... ..	50,220	2,907	12,582	812
1945-46 ... ..	57,251	3,253	12,884	826

*United Kingdom Government's Purchase of Australian Wool.*

The Australian wool clips of 1939-40 to 1944-45 inclusive were purchased by the United Kingdom Government under an agreement with the Commonwealth Government which terminated on 31st July, 1945. The 1945-46 clip also was purchased by the United Kingdom, but was managed and sold by the Joint Organisation set up by the Empire Governments concerned to market the war-time accumulation of wool concurrently with future clips (see page 522).

During the First World War (1914-18) the Australian clips were purchased by the United Kingdom Government; the war-time and post-war arrangements of this period are described in the Year Books for 1919 (page 527) and 1921 (page 781).

In the recent period payment for the wool was made on appraisement irrespective of the time of shipment. Shipping arrangements and the costs and risks of ocean transport were responsibilities of the United Kingdom. An average price per lb., greasy, at store was fixed for each entire clip and in addition a sum not exceeding 3d. per lb. was paid by the United Kingdom Government to cover expenses from brokers' store to shipboard, Australian ports. An increase of 15 per cent. in the average price applied from July, 1942. The agreement provided for equal sharing by the two Governments of profits arising from the re-sale of wool for use outside the United Kingdom.

The average prices paid for Australian wool clips under the agreement (not including share of profits) and in 1945-46 were:—

	Seasons 1939-40 to 1941-42.	Seasons 1942-43 to 1945-46.
English Currency, per lb. ... ..	10·75d.	12·3625d.
Australian equivalent, per lb. ... ..	13·4375d.	15·4531d.

The Central Wool Committee was appointed under National Security Regulations to administer the scheme in Australia, with the assistance of a Wool Committee in each State. The wool in each season was submitted for appraisement in accordance with a table of limits or lists of appraisement types (numbering more than 1,500) prepared by the Central Wool Committee. Soon after wool was appraised the grower received through the usual trade channels the appraised value, less a percentage (10 per cent.

in 1939-40 and 5 per cent. in the next four seasons) which the Committee retained until the end of the season for adjustment in case the aggregate appraised value should exceed the total value in terms of the agreement. In each season, however, the total value as appraised was less than the value at the agreed price, and the retention moneys, as well as additional amounts to equalise the valuations, were paid to growers after the close of the season. The practice of retaining part of the appraised price was discontinued after 1943-44.

Suppliers of wool derived from skins were paid full appraised value on appraisement and did not participate in equalisation payments.

Particulars of appraisements of the Australian wool clip in each of the seasons, 1939-40 to 1945-46, are shown below. Appraisements of skin wools and wool purchased by Australian manufacturers are included.

TABLE 470.—Appraisements of Australian Wool, 1939-40 to 1945-46.

Season.	Quantity of Wool.		Payments to Suppliers.			
			Appraised Value.		Additional Payment (to adjust appraised to flat rate value).	Total.
	(Greasy.	Scoured.	Total.	Average per lb. (greasy).*		
	lb.000	lb.000	£000	d.	£000	£000
1939-40 ...	1,066,237	45,829	59,842	12·40	4,881	64,723
1940-41 ...	990,833	53,206	55,251	12·08	5,709	60,960
1941-42 ...	1,034,617	55,853	58,472	12·24	5,168	63,640
1942-43 ...	1,048,049	51,369	66,677	13·91	6,877	73,554
1943-44 ...	1,044,228	54,021	66,856	13·93	7,022	73,878
1944-45 ...	883,767	47,315	56,075	13·76	6,527	62,602
1945-46 ...	823,335	43,612	51,480	13·57	6,710	58,190

\* In this table 1 lb. scoured wool is taken as equal to 2 lb. greasy.

The average appraised price per lb. (greasy) being less than the agreed price payable by the United Kingdom Government, the equalisation payments to suppliers of participating wool at the end of each season, expressed as a percentage of appraised value, were as follows:—8½ per cent. in 1940, 11 per cent. in 1941, 9½ per cent. in 1942, 11 per cent. in 1943, 11½ per cent. in 1944, 12½ per cent. in 1944-45 and 13·9 per cent. in 1945-46.

Details of appraisements in each State in 1944-45 and 1945-46 are shown below; the particulars for 1939-40 and 1940-41 were published on page 804 of the 1940-41 edition and for 1941-42 to 1943-44 on page 736 of the 1941-42 and 1942-43 editions of the Year Book. Wool appraised at Albury is included in the Victorian appraisements.

TABLE 471.—Appraisements of Wool in Each State, 1944-45 and 1945-46.

State.	Quantity of Wool.		Appraised Value.		Quantity of Wool.		Appraised Value.	
	Greasy.	Scoured.	Total.	Average per lb. (greasy).	Greasy.	Scoured.	Total.	Average per lb. (greasy).
	000 lb.	000 lb.	£000.	d.	000 lb.	000 lb.	£000.	d.
	1944-45.				1945-46.			
New South Wales...	327,503	18,028	20,294	13·40	339,203	16,720	20,591	13·26
Victoria ...	208,042	12,153	14,269	14·74	154,185	8,816	10,401	14·53
Queensland ...	151,670	11,335	10,186	14·02	169,722	12,074	11,094	13·73
South Australia ...	101,070	3,213	5,451	12·17	67,388	3,372	3,725	12·06
Western Australia ...	79,165	2,289	4,605	13·37	78,801	2,249	4,661	13·43
Tasmania ...	16,317	297	1,210	17·16	14,036	381	1,008	16·34
Total ...	883,767	47,315	56,075	13·76	823,335	43,612	51,480	13·57

Wool required for domestic consumption in Australia was excluded from the war-time agreement for sale to Great Britain, and arrangements were made to enable the Australian manufacturers to select supplies from appraised wools and from stocks held on United Kingdom account.

The price payable for wool purchased by the manufacturers in 1939-40 was the appraised price, plus  $\frac{1}{4}$ d. per lb. for costs and contingencies. The wool selected by manufacturers was of superior quality to the general average, and in later seasons a percentage was added to appraised prices with the view of adjusting them to the "agreed price" parity, i.e., the basis of sales to Great Britain. The additional charge to manufacturers, which was determined from 1st July, 1942, by the Prices Commissioner, was:—

Type of Wool.	1 July, 1940, to 30 June, 1941.	1 July, 1941, to 30 June, 1942.	1 July, 1942 to 31 Oct., 1945.	1 Nov., 1945, to 30 June, 1946.
Shorn Wool ... ..	7½	15	{ 10 5	10* 5*
Skin wool ... ..				

\* Or the difference between appraised value and the Central Wool Committee's official selling price, whichever the less.

Notwithstanding these adjustments, payments by manufacturers for selections up to 31st July, 1945, were estimated to be £664,576 less than the value of the wool.

From 17th February, 1941, a further charge was imposed on the wool contents of the manufactured products exported from the Commonwealth. The deferred charge was made as a percentage of the appraised price. It was 34½ per cent. to 30th June, 1941, then 27½ per cent. to June, 1942, then 25 per cent. to 30th April, 1944, and then 27½ per cent. to 30th October, 1945. From the latter date to 30th June, 1946, it was the amount, if any, between the price paid for the wool content and the Central Wool Committee's official selling price.

The following statement shows particulars of sales of wool to Australian manufacturers during the years ended June, 1940 to 1946. The amount of deferred charges on the wool contents of manufactured goods exported is not included; the total of such charges to 30th June, 1946, was £1,996,836.

TABLE 472.—Sales of Wool for Manufacture in Australia.

Year ended 30th June.	Quantity.		Appraised Value.		Additional Charges. (other than deferred charges.)	Total Payments.
	Greasy.	Scoured.	Total.	Average per lb. (greasy).		
	lb.000	lb.000	£000	d.	£000	£000
1940 ... ..	101,130	2,466	5,677	12-85	108	5,785
1941 ... ..	115,917	3,994	6,630	12-84	497	7,127
1942 ... ..	137,812	7,890	7,983	12-50	1,148	9,131
1943 ... ..	131,546	7,240	8,726	14-44	839	9,565
1944 ... ..	128,275	7,353	8,643	14-45	816	9,459
1945 ... ..	110,503	6,595	7,409	14-34	706	8,115
1946 ... ..	120,693	5,602	7,714	14-04	713	8,427

Sheepskins available for export were purchased by the United Kingdom Government in terms of an agreement concluded early in 1940. The scheme was administered by the Central Wool Committee, with the assistance of the Sheepskin Sub-Committee. The sheepskins were purchased at appraised values, according to a sheepskin table of limits. Sheepskins carrying not

more than  $\frac{1}{2}$ -inch of wool were excluded from the appraisements but the export of such skins was controlled by the Committee. Fellmongers in Australia who purchased sheepskins might be required to submit the skin wools for appraisalment under the wool purchase scheme and might then dispose of the pelts. Particulars of such skins are not included in the following table which relates to sheepskins acquired on account of the United Kingdom Government:—

TABLE 473.—Appraisements of Wool Sheepskins, 1939-40 to 1945-46.

Season.	New South Wales.			Australia.		
	Sheepskins.		Appraised Value.	Sheepskins.		Appraised Value.
	No.	Weight.		No.	Weight.	
		lb.	£		lb.	£
1939-40 ... ..	376,329	2,789,829	88,043	1,604,631	11,012,544	352,592
1940-41 ... ..	1,078,908	8,504,351	282,380	7,645,280	49,454,806	1,501,557
1941-42 ... ..	1,170,385	7,847,613	217,544	7,566,080	47,788,050	1,350,558
1942-43 ... ..	1,795,761	13,131,844	439,075	7,794,507	50,911,840	1,692,955
1943-44 ... ..	2,014,754	14,435,485	436,772	8,897,735	58,245,326	1,828,923
1944-45 ... ..	1,768,251	11,226,894	324,343	9,433,549	56,873,508	1,731,483
1945-46 ... ..	1,807,919	12,871,127	390,872	6,489,199	43,249,892	1,383,710

#### *Post-War Marketing of Wool.*

Under war-time arrangements with the United Kingdom Government regarding the purchase of the wool clips of Australia, New Zealand and South Africa a large quantity of wool was accumulated in the ownership of the United Kingdom and the stock as at 30th June, 1945, was estimated at 3,315 million lb., including Australian wool 2,060 million lb., New Zealand 540 million lb., and South African 645 million lb. In view of the marketing problems created by the existence of this surplus—equal to two years' consumption—a wool conference of representatives of the United Kingdom and the three Dominions was held in London in 1945. As an outcome of the conference, a plan was adopted for the establishment by the four Governments of a Joint Organisation to take charge of the marketing of the wool in stock and to support the marketing of new clips during the period of disposal. The basic elements of the plan are the determination of maximum reserve prices below which wool from stocks or current clips will not be sold and the joint responsibility of the several Governments for administration and finance.

Under the agreement, which was ratified by the Commonwealth Parliament, Dominion-grown wool owned by the United Kingdom as at 31st July, 1945, was transferred to the joint ownership of the United Kingdom and the Dominion Government concerned; wool subsequently acquired will also be in joint ownership.

The Joint Organisation established under the agreement was incorporated in England as a private limited company—U.K.-Dominion Wool Disposals Limited—on 21st May, 1946. It is to seek to reduce accumulated stocks progressively whilst maintaining stability of wool prices, and to strive to stimulate the demand for wool. From time to time it will buy, hold and sell wool on behalf of the four Governments concerned. It will determine the quantities of wool to be offered from time to time for sale concurrently in the Dominions and elsewhere, to be made up of all new clip wool and an appropriate proportion of wool from stocks, prepare schedules of reserve prices at which it may acquire wool, and lift from the market such quantities of new wool as cannot be sold at the reserve prices.



Shares in U.K.-Dominion Wool Disposals Limited are held by nominees of the Governments, viz., United Kingdom, 4; Australia, 2; New Zealand and South Africa, 1 each. An active subsidiary in each Dominion conducts operations on behalf of the principal company; that for Australia is the Australian Wool Realisation Commission.

The directors of the principal company consist of an independent chairman appointed by the four Governments in agreement—four directors representing the United Kingdom, two Australia, and one each New Zealand and South Africa. In addition, chairmen of the subsidiaries are, *ex officio*, directors without additional voting power.

Under the financial clauses of the agreement the Government of each Dominion has taken up half the original capital represented by the opening stock of its country's wool transferred to the Joint Organisation and will share equally the cost of further purchases of its wool by the Organisation and in profits or losses on realisation. The opening stock was taken in by the Joint Organisation at its original cost (including f.o.b. payments) less amounts accumulated in the divisible profits accounts, which is estimated to cover depreciation fully. The balances in the divisible profits accounts will be retained by the United Kingdom.

Half the operating expenses of the Joint Organisation will be borne by the wool industry, primarily from proceeds of a contributory charge on sales of new clips, and half by the organisation by means of a deduction from proceeds of sales. The net proceeds of sales will be used for repayment of capital equally between the United Kingdom and the Dominion Government concerned.

During the wool year, 1945-46, the United Kingdom was responsible for the purchase of the whole clip, management and sale being entrusted to the Joint Organisation. The United Kingdom was reimbursed by each Dominion for half the cost of that part of the Dominion's clip which was unsold at the end of the wool year. The net proceeds of the sales of old wool during this interim year, with profit or loss on sales of new clip wool, after meeting the operating costs of the Joint Organisation and incidental costs incurred by the United Kingdom in connection with the new clip, were allocated to capital repayment. All sales were made on the basis of selling prices determined by the Joint Organisation.

Stocks of Dominion wool held by Joint Organisation at 30th June, 1946, were approximately 1,968 million lb., and 1,277 million lb. less than estimated stocks at the 1945 conference. Actual stocks at 31st July, 1945, were 3,210 million lb.

The sale of wool at fixed prices by or on behalf of the Joint Organisation ceased on 30th June, 1946, and orders against which allocations had not been made on or before that date were cancelled.

Sales by auction were resumed in the United Kingdom and the Dominions in September, 1946 (in Sydney on 2nd September) with the general level of reserve prices for Dominion wool sold in the Dominions fixed by Joint Organisation at the official average selling price, ex store, ruling in each Dominion at 30th June, 1946. This initial reserve price level was maintained throughout the 1946-47 wool year.

All growers' wool from current clips together with quantities from stock as determined by the Organisation is offered at auction. If no buyer is forthcoming at reserve price or higher, the lot offered is taken over by the Joint Organisation at auction reserve price, subject to the growers' right of

withdrawal. If the price offered by a commercial bidder exceeds the reserve, the benefit accrues to the grower. The organisation may offer at auction wool from stocks in such quantities as will prevent prices from rising above the desired level. Moreover, in some circumstances, it may make standing offers to sell wool from stocks outside the auctions at a fixed percentage above the auction reserve, and in this way impose a ceiling on prices actually obtainable at auction.

The Australian Wool Realisation Commission appointed under the Wool Realisation Act, 1945 is the Australian subsidiary of the Joint Organisation. It consists of a chairman, an executive member, and four members representing producers' organisations, a representative of the Storemen and Packers' Union, and two persons with experience in valuation or marketing of wool. An Advisory Committee of Wool Selling Brokers has been appointed to advise the Commission in relation to the valuation and disposal of wool. There are eight members; two from each New South Wales and Victoria, and one from each of the other States. Wool Buyers' and Woollen and Worsted Manufacturers' Advisory Committees have been constituted also.

The functions of the Australian Wool Realisation Commission are to hold wool in Australia as agent for the principal company, to sell wool from stocks in Australia and arrange for the regulation of sales of current clips by auction, to assess appropriate reserve prices for individual lots of wool from stock and current clips on the basis laid down by the principal company, to take up wool offered at Australian auctions for which reserve price or better is not offered by a commercial buyer, to conduct the financial operations of the principal company in Australia, and to furnish to the principal company annual reports of its activities.

The stock of Australian wool held by the United Kingdom at 31st July, 1945, was costed at £100,000,000, and taking into account a credit balance of £20,000,000 in the divisible profits account in respect of quantities already sold, Australia's half-share of original capital is £40,000,000. Payment is to be made in four annual instalments out of Australia's share of the proceeds of sales made by the Organisation and the net profit earned in the interim year 1945-46. A minimum payment of one-quarter of the original capital must be paid each year, but if in any year that minimum plus any new capital required is exceeded by proceeds of sales and net profit of the interim year, the excess is to be paid to the United Kingdom in that year, reducing the amount of the fourth year's repayment correspondingly.

The Commission succeeded the Central Wool Committee on 16th November, 1945, and administered the system of acquisition on appraisement for the remainder of the 1945-46 wool year. On the resumption of auctions it acted to effectuate in Australia the general level of reserve prices determined by Joint Organisation but did not auction wool from stocks before the end of 1946.

Official selling prices for wool in Australia were fixed on an "ex store" basis from 1st November, 1945, to 30th June, 1946; in addition buyers were required to pay a delivery charge of  $\frac{1}{4}$ d. (Aust.) per lb. Regulations prohibiting the export of wool except with the permission of the Minister for Trade and Customs were continued in force after auctions were resumed in order to make the general reserve price effective. With the exception of wool consigned to brokers in the United Kingdom for sale by auction, permission for export is given only in respect of wool purchased in Australia after being submitted at auction.

For the purpose of meeting the wool industry's share of the operating expenses of the Joint Organisation and interest on Commonwealth funds for purchase of wool under the disposals plan, a contributory charge is levied on wool produced in Australia under the Wool (Contributory Charge) and the Wool (Contributory Charge) Assessment Acts of 1945. These Acts operated as from 1st July, 1946, superseding the Wool Tax Act, 1936-45. The contributory charge was at the rate of 5 per cent. during 1946-47 and was reduced to 0.75 per cent. of the sale value of wool in July, 1947. Wool sold by the Australian Wool Realisation Commission is not subject to the charge. A sum equal to the amount which otherwise would have been collected under the Wool Tax Act is set aside from proceeds of the contributory charge for publicity and research. (See page 526.)

## PRICES OF WOOL.

The following statement shows the average prices of greasy wool in New South Wales since 1876. Average prices obtained at Sydney auctions have been recorded by the Sydney Wool Selling Brokers' Association since 1899. Between 1876 and 1899 the table shows the average value of greasy wool as declared in export returns obtained by the New South Wales Customs Department. The average prices stated for the seasons ended June, 1940 to 1946 are the averages for greasy wool under the United Kingdom purchase plan. All prices are stated in Australian currency:—

TABLE 474.—Prices of Wool, Sydney, 1876 to 1945-46.

Average Export Value of Greasy Wool f.o.b. Sydney.				Average Price realised for Greasy Wool at Sydney auctions.					
Year ended 31st Dec.	Average Price Per lb.	Year ended 31st Dec.	Average Price Per lb.	Season ended 30th June.	Average Price Per lb.	Season ended 30th June	Average Price Per lb.	Season ended 30th June	Average Price Per lb.
1876	d.	1888	d.	1899	d.	1915	d.	1931	d.
1877	11	1889	8½	1900	7½	1916	8½	1932	8-8
1878	10½	1890	8	1901	11½	1917	10½	1933	8-6
1879	10½	1891	7	1902	5½	1918	14½†	1934	15-8
1880	9½	1892	7½	1903	6½	1919	14½†	1935	9-7
1881	10½	1893	7½	1904	8	1920	15½†	1936	14-0
1882	10½	1894	5½	1905	8½	1921	12½	1937	16-4
1883	10½	1895	6½	1906	9	1922	12½	1938	12-7
1884	10½	1896	7½	1907	9½	1923	17½	1939	10-3
1885	8½	1897	7	1908	9	1924	23½	1940	13-4½
1886	8	1898	7½	1909	7½	1925	25½	1941	13-1½
1887	8			1910	9½	1926	16½	1942	13-1½
				1911	8½	1927	17	1943	15-1½
				1912	8½	1928	19½	1944	15-3½
				1913	9½	1929	16½	1945	15-1½
				1914	9½	1930	10½	1946	15-1½

† Price as appraised under Imperial Wool Purchase Scheme. The average amount to be added to the value of greasy wool in respect of profits is 7-13d. per lb. of which 3-69d. accrued to Australian growers.

‡ Based upon the agreed price for sale of the clip to the United Kingdom Government.

These figures since 1899 (apart from the war periods) represent the average price of wool sold during the year and furnish an accurate guide to the average value per pound (greasy) of the clip produced in individual years, except that allowance for carry-over of unsold wool (see Table 467) is necessary in some seasons, viz.:—the average price realised for wool produced in 1920-21 was 12½d.; in 1924-25, 23½d.; in 1925-26, 16½d.; in 1933-34, approximately 15.4d. and in 1937-38 approximately 12.5d. The prices shown above are affected over long terms by changes in the proportion of merino to crossbred, and by such variable qualities as length, fineness, and soundness. Over short terms comparison is affected in a small degree by

changes in the proportion of natural grease in the wool and by variations in the proportionate quantities of wool of various qualities. The wool sold locally as scoured is of limited range and quantity, and the prices are not sufficiently representative to be of value for comparative purposes.

#### *Average Monthly Prices of Greasy Wool.*

An index of average monthly prices of wool at Sydney auctions was published in issues of the Year Book prior to 1940-41. It was based on data as to the clean scoured prices of principal types of wool obtained for successive sales from September, 1924, to the end of 1938-39, the last wool year prior to suspension of auction sales and the war-time purchase by Great Britain. The prices were combined into monthly averages and converted into an index in terms of pence per lb., greasy, comparable with the annual averages shown in Table 474.

#### *Wool Publicity and Research.*

In 1936 the Commonwealth enacted the Wool Publicity and Research Act, establishing the Wool Publicity and Research Funds to receive proceeds of a tax at a rate of 6d. per bale, 3d. per fadge or butt, and 1d. per bag of wool marketed. The rate of tax was increased from 1st June, 1945, to 2s. per bale, 1s. per fadge and 4d. per bag, and as from 1st July, 1946, the tax was superseded by a contributory charge on the sale value of all wool produced in Australia, made under the Wool (Contributory Charges) Act, 1945. The proceeds of the Wool Tax, or a sum equal to the amount which would have been collected as wool tax but for the operation of the Wool (Contributory Charges) Act, is paid into the Wool Use Promotion Fund created by the Wool Use Promotion Act, 1945. The Fund is administered by the Australian Wool Board and may be applied for payment into the Wool Research Trust Fund, in promoting the use of wool, for the benefit of the Australian wool industry in ways approved by the Minister, and in meeting the administrative expenses of the Board.

South Africa, New Zealand, and the Australian Wool Board and representatives of the wool industry of the three countries co-operated in the establishment of an International Wool Publicity and Research Fund (which came into being on 1st July, 1937). Contributions are based on the average quantity of wool exported over a period of five years; Australia's quota is approximately 62 per cent. of the total. The authority in each country undertakes local research and publicity.

The Wool Use Promotion Act repealed the Wool Publicity and Research Act of 1936 in June, 1945, and provided for the reconstitution of the Australian Wool Board and the appointment of a Wool Consultative Council comprising the Commonwealth Wool Adviser, two producer members of the Wool Board, and six other members to represent the Council for Scientific and Industrial Research, wool manufacturers, textile distributors, technical education authorities and appropriate trades unions. It is the function of the Wool Board to promote by publicity and other means the use of wool in Australia and other countries.

The Act also created a Wool Research Trust Account which receives annually a Commonwealth grant equal to the amount of wool tax collected or the amount which would have been collected as wool tax were it not for operation of the Wool (Contributory Charges) Act. The funds in this account may be used for purposes of scientific, economic and cost research in connection with wool and woollen goods and in co-ordinating and applying the results of such research.

The amount of Wool Tax collected in Australia and in New South Wales, the total income and expenditure of the Wool Board, Australia's contribution to the International Wool Publicity and Research Fund, allocations by the Wool Board for scientific pastoral research, and the balance transferred to accumulated funds of the Board in each year from 1936-37 to 1945-46 are shown in the following table:—

TABLE 475.—Australian Wool Board, Income and Expenditure, 1936-37 to 1945-46.

Year.	Income.			Expenditure.			Balance Transferred to Accumulated Funds.
	Proceeds of Wool Tax.	Amount of Tax Collected in N.S.W.	Total Income of Board.	International Secretariat.*	Pastoral Research.	Total Expenditure.	
	£	£	£	£	£	£	£
1936-37 ... ..	72,805	32,616	73,843	...	22,844	25,691	47,652
1937-38 ... ..	77,523	32,689	79,479	38,945	10,103	55,323	24,156
1938-39 ... ..	74,356	28,889	76,973	38,825	12,028	58,197	18,776
1939-40 ... ..	84,399	35,175	86,576	39,052	11,621	65,777	20,799
1940-41 ... ..	84,255	34,229	87,134	39,139	17,460	71,705	15,429
1941-42 ... ..	85,948	35,401	90,153	38,934	14,446	67,237	22,916
1942-43 ... ..	81,782	31,349	87,464	38,970	11,967	57,185	30,279
1943-44 ... ..	84,629	34,398	91,853	38,971	15,450	60,948	30,905
1944-45 ... ..	72,104	29,197	80,823	38,967	15,744	72,605	8,218
1945-46 ... ..	269,925†	113,850	278,993	65,839	14,273	114,599	164,394

\* Includes cost of transfer of contribution overseas.

† The Wool Tax was increased as from the 1st June, 1945.

During the ten years of its administration the Australian Wool Board has allocated £145,936 for scientific pastoral research in reference to sheep diseases, nutrition, external parasites, fertility, poison plants, pasture management, agrostology and wool investigations and in the nine years ending 30th June, 1946, it contributed a total of £377,642 (including cost of transfer of funds overseas) to the International Wool Publicity and Research Fund. The sum of £383,524 was held in the Board's accumulated fund account at 30th June, 1946.

Publicity and research in relation to the pastoral industry is undertaken by Australian Pastoral Research Trust Limited. Its objects are to promote the growth, development, and best interests of the pastoral and grazing industry, especially through scientific and economic research relating to stock diseases, animal pests, harmful plant life, edible plants, and drought feeding problems. The work of the Trust is co-ordinated with that of the Council for Scientific and Industrial Research.

#### *Wool Industry Fund Act, 1946.*

Moneys, estimated to total £7,000,000 approximately, were accumulated by the Wool Realisation Commission as a result of certain activities of the Central Wool Committee which were not within the limits of the war-time wool purchase plan. The amounts accrued mainly in the handling of skin wools, and in respect of wool tops, noils and waste, and of deferred payments on the wool content of manufactures exported from Australia.

The Wool Industry Fund Act, 1946, established a fund of the same name to receive this money. The Commonwealth Treasurer administers the fund. After consulting the Ministers of Commerce and Agriculture, Post-war Reconstruction and the Minister administering the Science and Industry Research Act, he may apply the capital and income of the fund for scientific, economic and cost research, and in co-ordinating and applying the results of such research in the production and use of wool and woollen goods, to

promote the use of wool in Australia and throughout the world, in assisting in marketing and in stabilising the price of wool, in the provision (if necessary) of temporary relief for the wool industry, and to meet, wholly or in part, any loss which the Commonwealth may suffer through participation in the wool disposals plan.

## CATTLE.

Apart from dairying, industries connected with cattle, such, for instance, as the production of beef for export, have never existed on a large scale in New South Wales. Local production scarcely meets the requirements of local consumption, and cattle are imported from Queensland. The number of cattle depastured in 1922 (3,546,530) was the highest recorded in the State. Subsequently unfavourable markets led to a diminution in herds.

From 1930 to 1935, there was temporary revival in the breeding of cattle for the export trade in beef, and the number in the latter year was almost as high as in 1922. A decrease in imports, heavy slaughterings and unfavourable seasons in the dairying districts led to a decline in the next five years. Then the number commenced to increase as a result of the war-time expansion in the demand for beef.

The following table shows the total number of cattle in the State, including dairy cattle, at various dates:—

TABLE 476.—Number of Cattle in New South Wales, 1861 to 1946.

Year.*	Cattle.	Year.*	Cattle.	Year.*	Cattle.
1861	2,271,923	1906	2,549,944	1938	3,019,581
1866	1,771,809	1911	3,194,236	1939	2,811,884
1871	2,014,888	1916	2,405,770	1940	2,762,653
1876	3,131,013	1921	3,375,267	1941	2,769,061
1881	2,597,348	1926	2,937,130	1942	2,878,450
1886	1,367,844	1931	2,840,473	1943	3,030,546
1891	2,128,838	1935	3,482,831	1944	3,143,378
1896	2,226,163	1936	3,388,538	1945	3,144,701
1901	2,047,454	1937	3,288,169	1946	3,116,834

\*As at 31st December to 1916; 30th June, 1921 to 1931; and 31st March in later years.

Particulars of cattle according to sex and age at 31st March in each of the last eleven years are shown below:—

TABLE 477.—Cattle According to Sex, 1936 to 1946.

As at 31st March.	Bulls over 1 year.	Cows and Hifers.			Bullocks, Steers, etc.	Calves, under 1 year.	Grand Total.
		In Registered Dairies.	Other.	Total.			
1936	55,354	1,157,584	976,089	2,133,673	625,795	573,716	3,388,538
1937	54,078	1,128,228	973,280	2,101,508	614,655	517,928	3,288,169
1938	50,906	1,094,915	867,435	1,962,350	523,884	482,441	3,019,581
1939	49,463	1,068,906	782,053	1,850,959	473,658	437,804	2,811,884
1940	49,361	1,068,999	774,394	1,843,393	386,787	483,112	2,762,653
1941	50,900	1,054,770	779,282	1,834,052	409,183	474,926	2,769,061
1942	53,195	1,055,172	830,650	1,885,822	401,281	538,152	2,878,450
1943	58,289	1,054,511	873,191	1,927,702	487,859	556,696	3,030,546
1944	59,142	1,043,273	925,214	1,968,487	509,968	605,781	3,143,378
1945	59,212	1,035,991	923,530	1,959,521	532,347	593,621	3,144,701
1946	59,565	1,021,087	942,916	1,964,003	570,568	522,698	3,116,834

Cattle in registered dairies decreased by 3,151 in 1944-45 and by 53,221 in 1945-46 to 1,198,314 in March, 1946. At 31st March there were 16,405 more cows in milk in these herds in 1945 than in 1944 but 31,463 fewer in 1946 than in 1945, and the number of young stock (heifers and calves) showed an increase of 11,176 and a decrease of 16,470 in the respective intervals. In March, 1946, there were 35,185 fewer dry cows than in March, 1944.

Beef cattle increased by 34,576 over the two seasons to 1,800,185 in March, 1946, although the number of calves in beef herds decreased by 49,732.

Further details regarding dairy and beef cattle in New South Wales at 31st March, 1944 to 1946, are as follows:—

TABLE 478.—Cattle in Registered Dairies and Beef Cattle, March, 1944 to 1946.

Particulars.	March, 1944.	March, 1945.	March, 1946.	Particulars.	March, 1944.	March, 1945.	March, 1946.
Cattle in Registered Dairies—				Beef Cattle—			
Bulls ...	26,116	25,767	25,281	Bulls ...	33,026	33,445	34,284
Cows—Milking ...	609,867	626,272	594,809	Cows and Heifers ...	802,131	804,365	824,581
Dry ...	227,268	196,885	192,083	Calves ...	420,484	403,844	370,762
Heifers ...	206,138	212,834	234,195	Other ...	509,968	532,347	570,568
Calves ...	185,297	189,777	151,940	Total (Beef)...	1,765,609	1,774,001	1,800,185
Total (Regd. Dairies) ...	1,254,686	1,251,535	1,198,314	Total, All Cattle	3,143,378	3,144,701	3,116,834
Other Milking Cows ...	123,083	119,165	118,335				

### Calving.

Information as to the number of calves dropped has not been collected since 1931, because unsatisfactory features rendered the returns of doubtful value. According to the returns received the average number was 893,719 per annum in the five years ended 1924-25, and 897,711 in the years 1925-26 to 1929-30, reaching a peak of 947,442 in 1930-31.

Particulars of calves slaughtered for food annually, and the number surviving at 31st March, 1935 to 1946, are shown in the following table:—

TABLE 479.—Calves Slaughtered and Number at end of Year, 1934-35 to 1945-46.

Year ended 31st March.	Calves.		Year ended 31st March.	Calves.		Year ended 31st March.	Calves.	
	Slaught-ered.	Surviving at end of Year.		Slaught-ered.	Surviving at end of Year.		Slaught-ered. *	Surviving at end of Year.
1935	370,739	615,593	1939	458,613	437,804	1943	379,146	556,696
1936	443,761	573,716	1940	441,043	483,112	1944	348,151	605,781
1937	486,231	517,928	1941	402,345	474,926	1945	396,301	593,621
1938	457,854	482,441	1942	421,564	538,152	1946	388,683	522,698

\* Calendar Year ended three months earlier.

### Interstate Movements of Cattle.

By reason of diseases among the cattle of certain districts, and the presence of cattle tick in the north-east of New South Wales and in parts of Queensland, the interstate movement of cattle is regulated closely.

The following table shows the number of live cattle (so far as recorded) which passed into and out of New South Wales during each of the last ten years. Practically all the movement is overland, comparatively few cattle being transported by sea:—

TABLE 480.—Interstate Movements of Cattle, 1936-37 to 1945-46.

Year ended 30th June.	From New South Wales.				To New South Wales.			
	To Victoria.	To Queensland.	To South Australia and by Sea.	Total.	From Victoria.	From Queensland.	From South Australia and by Sea.	Total
	No.	No.	No.	No.	No.	No.	No.	No.
1936-37	69,175	35,732	15,873	120,780	21,938	167,269	741	189,948
1937-38	62,405	30,744	9,008	102,157	17,428	126,804	2,017	146,249
1938-39	60,323	29,277	11,135	100,735	32,607	191,119	3,918	227,644
1939-40	125,432	26,256	18,561	170,249	20,785	237,242	2,378	260,405
1940-41	95,532	11,183	14,168	120,883	21,496	251,556	3,680	276,732
1941-42	54,117	10,236	12,163	76,516	16,450	227,477	4,799	248,726
1942-43	63,990	9,359	33,786	107,135	12,574	392,459	3,344	408,377
1943-44	52,451	10,969	12,385	75,805	15,493	272,353	2,772	290,618
1944-45	51,701	16,301	6,759	74,761	13,096	277,388	6,661	297,145
1945-46	54,765	22,445	6,833	84,043	11,537	380,645	1,374	393,556

Although the effects of seasonal variations are apparent there is, on the whole, a heavy but fluctuating import of cattle to New South Wales from Queensland, and an appreciable export to Victoria. The interchange with South Australia is usually small.

During the last five years there was an excess of imports from Queensland of 1,481,012 cattle, and an excess of exports to Victoria amounting to 207,874, and to South Australia of approximately 52,976. The total net gain to New South Wales from all sources was 1,220,162.

#### *Increase and Decrease of Cattle.*

The number of cattle in New South Wales varies under the influence of three factors, viz., importation, slaughtering, and natural increase, or excess of calving over deaths from causes other than slaughtering. Available particulars of increases and decreases in recent years are shown below:—

TABLE 481.—Increase and Decrease of Cattle, 1936 to 1946.

Year.	Net Import of Cattle.	Calves reared (Surviving at 31st March).	Cattle and Calves died from Disease, Drought, etc.	Cattle Slaughtered (excluding Calves).	Cattle at end of Year.
1935-36	90,977	573,716	141,006	652,032	3,388,538
1936-37	69,168	517,928	133,077	699,467	3,288,169
1937-38	44,092	482,441	134,721	764,375	3,019,581
1938-39	126,909	437,804	140,478	676,786	2,811,884
1939-40	90,156	483,112	69,279	681,425	2,762,653
1940-41	155,849	474,926	137,781	557,380	2,769,061
1941-42	172,210	538,152	*	619,059	2,878,450
1942-43	301,242	556,696	*	639,953	3,030,546
1943-44	214,813	605,781	*	645,837	3,143,378
1944-45	222,384	593,621	123,967	608,453	3,144,701
1945-46	309,513	522,698	150,184	565,810	3,116,834

\* Not available.



The figures shown in the table do not balance from year to year because it is not possible to obtain all necessary data relative to calving and to disposal of calves. Nevertheless the table illustrates in a general way the influence of the various factors.

### HORSES.

The number of horses in New South Wales was highest in 1913 when there were 746,170. The number was maintained near this level until a decline occurred during a drought which terminated in June, 1920. With increased use of motors for transport and tractors on farms the number of horses has decreased progressively and in 1946 was 403,645 or 46 per cent. below the record number and 139,217 fewer than in 1936. Nearly 90 per cent. of the horses are on rural holdings.

The following table shows the number of horses in New South Wales at quinquennial intervals from 1861 to 1941, and in each of the last four years.

TABLE 482.—Horses in New South Wales, 1861 to 1946.

Year.*	Horses.	Year.*	Horses.	Year.*	Horses.
1861	233,220	1896	510,636	1931	524,512
1866	274,437	1901	486,716	1936	542,862
1871	304,100	1906	537,762	1941	531,776
1876	366,703	1911	689,004	1943	483,277
1881	398,577	1916	719,542	1944	465,672
1886	361,663	1921	663,178	1945	436,443
1891	469,647	1926	651,035	1946	403,645

\* As at 31st December to 1911; at 30th June, 1916 to 1931; and at 31st March thereafter.

The horses recorded at 31st March included 242,775 draught horses in 1943, 230,949 in 1944, 213,158 in 1945, and 192,617 in 1946.

There is comparatively little interstate movement of horses except to and from Queensland, and practically no import by sea. Records of border crossings indicate that there was a net export of 1,111 in 1942-43, 4,386 in 1943-44, 3,961 in 1944-45, and 1,274 in 1945-46.

The landholders' returns indicate that 27,227 horses died from disease, drought, etc., on rural holdings in 1945-46.

### Horse Breeding.

With the object of improving the breed of horses provision has been made in terms of the "Horse Breeding Act, 1940" (not enforced since 31st January, 1944), for the registration of stallions for breeding purposes after a veterinary officer of the Department of Agriculture has certified that the animal conforms to an approved standard. The Western Division of the State is outside the scope of the Act, and thoroughbred horses registered in the Australian Stud Book are exempted from its provisions.

The following table shows the number of foals recorded at the end of certain years since 1921:—

TABLE 483.—Foals, 1921 to 1946.

30th June.	Foals Surviving.	31st March.	Foals Surviving.	31st March.	Foals Surviving.	31st March.	Foals Surviving.
1921	20,065	1936	43,092	1941	29,137	1944	23,333
1926	36,521	1939	29,282	1942	26,921	1945	19,837
1931	16,370	1940	29,014	1943	22,977	1946	16,209

#### OTHER LIVE STOCK.

Particulars of the number of pigs in the State are shown in Table 452 of this chapter and in the chapter relating to dairying.

The number of goats in New South Wales as recorded in March, 1941, was 14,156, including 1,640 Angora goats. Under the provisions of the Dog and Goat Act, 1898, the use of dogs or goats for purposes of draught is prohibited.

In New South Wales camels are used principally as carriers on the Western Plains, but their number is declining. The number at 31st March, 1941, was only 245, as compared with 1,792 at the close of the year 1913.

Donkeys and mules are not used extensively in New South Wales, the numbers in 1941 being 181 donkeys and 45 mules. Most of these were in the Western Division, where they were used for purposes of transport.

#### PRICES OF LIVE STOCK.

The following statement shows the average prices of certain classes of fat stock in the metropolitan saleyards at Flemington during the years 1939 to 1946. The averages stated are the means of the monthly prices in each calendar year, and the monthly prices are the averages for all stock sold each sale day during the month. Prices of certain types of pigs are given in Table 520. Monthly prices of these and other classes and grades of fat stock are published in the Statistical Register.

TABLE 484.—Average Prices of Fat Stock, 1939 to 1946.

Stock.	1939.	1942.	1943.	1944.	1945.	1946.
Cattle—	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.
Bullocks—Prime, Medium ...	11 3	15 8	16 14	17 6	18 0	18 8
Cows and Heifers—Prime						
Heavy ... ..	8 16	13 4	14 0	14 0	14 14	14 5
Sheep and Lambs—	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Merino Wethers—Prime ...	17 3	20 7	22 11	23 4	25 7	29 3
Merino Ewes—Prime ...	14 5	16 0	18 2	15 11	21 10*	25 0*
Lambs and Suckers—Prime						
Heavy ... ..	20 11	23 2	25 9	27 9	31 3	36 3

\*Prime Heavy.

Prices of livestock vary from year to year under the influence of seasonal conditions. When pastures are deteriorating during periods of dry weather fat stock are hastened to market and prices decline, but with the advent of relief rains stock are retained on the holdings for fattening or breeding and prices tend to rise. Under normal conditions prices of cattle at Flemington are influenced by the demand for beef for local consumption and by the condition of the export trade, particularly in its effect on the supply of cattle from Queensland for the New South Wales market. A downward trend in cattle prices in 1939 was arrested upon the announcement of the United Kingdom meat contract towards the end of the year. Transport difficulties affected the export trade in 1941, but further increases in prices occurred in later years as a result of expansion in demand for meat, and latterly because of drought.

The price of wool is a further factor affecting prices of sheep and lambs. The average price of wool under the United Kingdom purchase agreement in September, 1939, was higher than the pre-war level, and it was increased by 15 per cent. in July, 1942. Heavy drought losses caused a sharp rise in sheep and lamb prices in the second quarter of 1944. High prices ruled thereafter, and when wool prices advanced upon the resumption of wool auctions, prices rose still higher in the latter half of 1946 to levels approximately twice as high as in 1939.

Monthly variations in the prices of typical grades of live stock are shown below:—

TABLE 485.—Monthly Prices of Live Stock, 1944 to 1946.

Month.	Bullocks. Prime Medium Weight.			Merino Sheep. Prime Wethers.			Lambs and Suckers. Prime Heavy.		
	1944.	1945.	1946.	1944.	1945.	1946.	1944.	1945.	1946.
	£ s.	£ s.	£ s.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	16 15	17 8	17 14	20 8	21 5	22 6	24 4	28 3	29 2
February...	16 8	18 4	18 13	21 8	25 10	25 4	24 4	31 4	32 3
March ...	16 13	18 5	17 19	20 11	25 0	26 3	24 3	32 2	33 1
April ...	16 11	17 17	17 4	22 2	24 5	25 10	25 7	29 4	34 0
May ...	16 16	17 13	16 7	25 10	25 11	27 5	29 6	30 11	34 1
June ...	17 14	17 17	15 10	30 8	28 3	27 11	36 6	35 4	35 1
July ...	18 13	18 1	16 1	30 6	29 4	31 2	35 6	34 10	40 5
August ...	19 0	18 16	18 0	25 7	31 5	32 3	31 5	36 7	39 6
September	17 15	18 17	19 3	24 11	28 7	34 5	27 10	33 6	40 6
October ...	17 15	17 19	20 4	20 9	22 9	34 4	25 1	27 3	39 0
November	16 16	16 19	21 0	18 2	22 1	31 0	24 0	27 1	37 4
December	16 14	17 18	23 1	18 0	22 3	32 10	25 1	28 5	40 3
Average for year	17 6	18 0	18 8	23 4	25 7	29 3	27 9	31 3	36 3

The quantity of wool carried affects the price of sheep considerably. As a general rule sheep at market in January and February have been shorn, during March and April they have growing fleece, from May to August they are woolly, and from September to the end of the year both shorn and woolly sheep are marketed.

#### SLAUGHTERING OF LIVE STOCK.

The slaughter of live stock for sale as food, either for local consumption or for export, is permitted only in places licensed for the purpose.

The following table shows the average number of slaughtering establishments and the number of stock slaughtered in the State in quinquennial periods since 1897 and particulars for each of the last eight years. The figures relating to the establishments prior to 1921 are in excess of the actual number, as they include a large number of butchers' shops in country districts.

TABLE 486.—Slaughtering of Live Stock, 1897 to 1946.

Period.	Slaughter- ing Establish- ments.	Stock Slaughtered in Establishments and on Farms and Stations.							Pigs.	
		Sheep.			Cattle.					
		Sheep.	Lambs.	Total.	Bullocks. *	Cows.	Calves.	Total.		
Average—		Thousands.								
5 Years ended—										
December, 1901	...	1,780	4,868	158	5,026	231	117	22	370	214
December, 1906	...	1,587	3,760	188	3,948	201	87	20	308	238
December, 1911	...	1,275	5,780	389	6,169	260	138	42	440	251
June, 1916†	...	1,192	5,279	476	5,755	306	217	64	587	278
December, 1921	...	926	3,788	337	4,125	275	136	55	466	296
December, 1926	...	1,077	3,625	809	4,434	397	218	139	754	348
December, 1931	...	1,078	4,272	1,364	5,636	312	246	154	712	421
March, 1936	...	1,132	4,581	2,309	6,890	323	218	292	833	488
December, 1941	...	1,018	4,040	2,889	6,929	350	326	449	1,125	569
December, 1946	...	800	5,129	3,558	8,687	361	267	390	1,018	538
Year ended—										
March, 1939	...	1,012	3,852	2,460	6,312	336	341	459	1,136	558
December, 1941	...	906	4,223	3,945	8,168	292	266	402	960	597
December, 1942	...	878	4,446	3,682	8,128	352	267	422	1,041	738
December, 1942	...	828	4,948	4,348	9,296	369	271	379	1,019	669
December, 1943	...	812	5,531	3,945	9,476	388	258	348	994	503
December, 1944	...	801	5,625	3,785	9,410	359	249	396	1,004	555
December, 1945	...	791	5,082	2,936	8,018	300	266	389	955	495
December, 1946	...	772	4,460	2,776	7,236	388	293	435	1,116	468

\* Includes a small number of bulls.

† 4½ years.

Sheep were slaughtered in record numbers during the war years and notwithstanding decreases in 1945 and 1946 (due to drought reduction of flocks) the annual average in the years 1942 to 1946 was more than 25 per cent. greater than in the five years ended March, 1941. Cattle slaughtering increased in the nineteen-thirties and was well sustained in 1942-46, but after marked increase, pig slaughtering has latterly fallen below the pre-war level.

The following summary shows the distribution of slaughtering operations in New South Wales in the years 1945 and 1946. For purposes of classification in this table the term "abattoirs" relates to establishments in which 100,000 or more sheep and lambs were slaughtered. The Newcastle District Abattoir is included with other large establishments under the heading "Other Abattoirs," and all licensed slaughter-houses, except those included as abattoirs, are included under the heading "Country Slaughter-houses."

The slaughtering on rural holdings is shown under the heading "Station and Farms."

TABLE 487.—Slaughtering of Livestock, 1945 and 1946.

District and Establishments.	Sheep.	Lambs.	Cattle.			Pigs.
			Bullocks.	Cows.	Calves.	
1945.						
State Abattoirs ... ..	1,339,868	1,230,800	75,450	83,050	58,739	139,577
Other Abattoirs ... ..	1,433,868	1,272,089	73,658	45,965	41,952	63,645
Total Abattoirs ... ..	2,773,736	2,502,889	149,108	129,015	100,691	203,222
Country Slaughter-houses	1,428,474	341,918	146,589	134,688	285,988	287,898
Stations and Farms ... ..	879,949	90,894	4,073	2,337	2,004	4,177
Grand Total ... ..	5,082,159	2,935,701	299,770	266,040	388,683	495,297
1946.						
State Abattoirs ... ..	1,256,808	1,280,246	89,184	97,574	65,368	124,055
Other Abattoirs ... ..	1,213,535	1,130,820	98,908	57,889	47,466	53,200
Total Abattoirs ... ..	2,470,343	2,411,066	188,092	155,463	112,824	177,255
Country Slaughter-houses	1,161,135	259,393	194,599	134,965	320,211	284,520
Stations and Farms ... ..	828,256	105,167	5,483	2,665	2,323	6,561
Grand Total ... ..	4,459,734	2,775,626	388,174	293,093	435,358	468,336

## STATE ABATTOIRS.

The State Abattoirs are situated at Homebush Bay, near Sydney. Animals sold at Flemington Saleyards are inspected before being killed and those found to be diseased are destroyed, while "doubtful" beasts are marked for further special attention at the abattoirs. There is a staff of inspectors at the State Abattoirs and inspectors are stationed at private slaughtering premises throughout the County of Cumberland. The operations of the inspectorial staff are supervised by the veterinary officers of the Metropolitan Meat Industry Commission, who pay regular visits to the different establishments.

Particulars of stock slaughtered at the State Abattoirs, Homebush Bay, during recent years are shown in the following statement:—

TABLE 488.—Stock Slaughtered at the State (Metropolitan) Abattoirs, 1935-36 to 1946.

Year ended 31st March.	Cattle.	Calves.	Sheep.	Lambs.	Pigs.
1936 ... ..	208,514	146,268	1,369,325	1,404,901	173,032
1937 ... ..	235,986	150,880	1,611,244	1,373,811	184,811
1938 ... ..	253,494	141,383	1,570,662	1,361,519	175,243
1939 ... ..	190,764	123,138	1,323,226	1,293,157	153,825
1940 ... ..	190,850	89,985	1,349,040	1,545,797	145,786
1941 ... ..	129,001	74,170	1,227,563	2,202,882	176,364
1942 ... ..	134,509	65,142	1,324,167	2,149,231	203,068
1942* ... ..	138,475	65,827	1,608,095	2,194,138	182,432
1943* ... ..	153,525	57,243	1,722,685	1,865,415	139,079
1944* ... ..	161,542	64,796	1,584,760	1,726,800	155,547
1945* ... ..	158,500	58,739	1,339,868	1,230,800	139,577
1946* ... ..	186,758	65,368	1,256,808	1,280,246	124,055

\* Calendar Year.

## MEAT WORKS.

Apart from slaughtering, important subsidiary industries in the handling of meat have arisen in the form of refrigerating and meat-preserving works. Particulars of the operations of meat and fish preserving works are shown on page 666 of this volume.

During 1942-43 plants for drying meat were installed at a number of establishments in New South Wales.

*Meat Export Trade.*

The meat export trade commenced to assume importance in New South Wales towards the end of the nineteenth century, when the export of frozen meat became possible through the provision of refrigerated space in ocean steamers. During 1932 a method was evolved for the transport of chilled meat from Australia and export of meat in chilled condition was expanding when shipment was suspended after the outbreak of war in 1939.

Special attention is given to preparation and transport of meat for export. Stringent regulations are issued by the Department of Commerce and Agriculture regarding inspection and shipment of meat exported, and the work is closely supervised by the Commonwealth veterinary authorities.

The surplus of stock available in New South Wales for slaughter for export depends mainly upon the season, as in periods of scarcity the local demand absorbs the bulk of the fat stock marketed.

The quantity of Australian frozen and chilled beef, mutton and lamb, and of Australian tinned meats exported from New South Wales to overseas destinations in various years from 1911 is shown below. Ships' stores amounting annually to several million pounds in weight are not included in the table:—

TABLE 489.—Export of Meats from New South Wales, 1911 to 1945-46.

Year.	Frozen or Chilled Beef, Mutton and Lamb.				Meats Preserved in Tins.	
	Beef.	Mutton and Lamb.	Total of foregoing.		Weight.	Value.
			Weight.	Value.		
1911	cwt.	cwt.	cwt.	£	lb.	£
1920-21	65,097	535,259	600,356	758,155	20,783,779	401,384
1930-31	110,727	166,039	276,766	937,040	4,479,460	235,801
1935-36	19,019	327,757	346,776	663,690	2,438,624	81,842
1938-39	82,370	437,071	519,441	1,377,946	3,655,186	120,393
1939-40	105,761	401,643	507,404	1,310,861	2,326,403	78,107
1940-41	248,860	750,528	999,388	2,329,445	6,626,783	281,347
1941-42	43,497	832,074	875,571	2,446,799	14,935,252	706,596
1942-43	60,978	453,645	514,623	1,519,443	30,989,187	1,506,254
1943-44	65,203	580,518	645,721	1,937,846	32,405,514	1,543,209
1944-45	91,870	243,443	335,313	1,073,767	50,832,390	2,586,810
1945-46	111,176	167,382	278,558	901,196	47,611,150	2,746,929
	125,760	145,759	271,519	907,747	40,528,048	2,386,868

The quantity of frozen pork exported has usually been small, but during the war years (1939-45) shipments increased considerably, reaching 3,329,000 lb., valued at £125,772, in 1943-44. In 1945-46 the figures were 448,000 lb. and £21,267, respectively. Details for each recent year are given in Table 522 of this volume.

In the frozen meat trade, lamb has largely replaced mutton. In 1911 the overseas exports from New South Wales were 1,149,241 carcasses of frozen mutton and 292,258 carcasses of frozen lamb. The corresponding numbers were mutton 272,501 and lamb 1,060,507 in 1938-39; mutton 98,668, lamb 462,507 in 1944-45; and mutton 87,764, lamb 338,572 in 1945-46.

Great Britain provides the principal overseas market for Australian meat and in pre-war years more than 95 per cent. of the exports of frozen meat was sent to the United Kingdom. Since September, 1939, export to the United Kingdom has been under contract, as described below.

#### CONTROL OF THE MEAT EXPORT TRADE.

The export of Australian meat is controlled by the Australian Meat Board under the provisions of the Meat Export Control Act, 1935-1946. The Board was appointed in January, 1936, and was reconstituted in November, 1946, when the war-time office of Controller of Meat Supplies was abolished. It consists of a representative of the Commonwealth Government as chairman, and representatives of lamb, mutton, beef and pig producers, meat exporting companies, publicly owned abattoirs and freezing works, and meat industry employees. A Meat Advisory Committee may be appointed in each State to assist the Board in carrying out its functions. From the 28th November, 1946, until the expiry of the National Security Act on the 31st December, 1946, representatives of the Commonwealth Prices Commissioner and the Director of Rationing were also members of the Board. In certain circumstances decisions of the Board to which the chairman dissents are subject to Ministerial approval and direction.

The Act empowers the Board to make recommendations for regulating exports of meat, meat products and edible offal, quality standards and grading of exports and export programmes, to foster scientific research and overseas trade in Australian meat, to regulate shipments, arrange shipping and insurance contracts, and to purchase, manage and sell meat on behalf of the Commonwealth. It may maintain a representative or representatives in London. The Meat Industry Act, 1946, empowered the Board to assume the functions of the Controller of Meat Supplies and the Meat Canning Committee from the 28th November, 1946, until the expiry of the National Security Act.

To make export control effective, meat, etc., may be exported only under licence or Ministerial permit and subject to such conditions and restrictions as are prescribed after recommendation by the Meat Board. However, on request, the holder of an export licence must slaughter and treat stock on an owner's account, on a weight and grade basis, for submission for export at rates and on conditions as specified from time to time by the Board.

Under the Meat Export Charges Act, 1935, proceeds of a small levy imposed on all meat exported from the Commonwealth are paid into a Meat Export Fund to provide for administrative expenses and research. From November, 1946, funds may be provided for the Board out of consolidated revenue and advances may be obtained from the Treasurer and

the Commonwealth Bank for use on behalf of the Commonwealth. Details of the Board's income and expenditure for the last three years and its accumulated funds are as follow:—

Year ending 30th June.	Export Levies Collected.	Export Levies Collected in N.S.W.	Total Income.	Research Contributions	Total Expenditure.	Transfer to Accumulated Fund.
	£	£	£	£	£	£
1944 ... ..	6,226	893	7,323	582	6,136	1,187
1945 ... ..	6,217	692	7,333	635	5,528	1,805
1946 ... ..	3,856	539	4,968	894	9,068	(—)4,100

During the eleven years of its administration the Board has provided £7,866 for scientific research in relation to meat. The accumulated funds of the Board at the 30th June, 1946, were £37,764.

#### *War-time Control of the Meat Industry.*

Purchases by the United Kingdom Ministry of Food prior to the extension of warfare to the Pacific Zone were determined largely by the shipping available, and thus there was uncertainty regarding the quantity and classes of meat which would be accepted. Because this tended to check production the Commonwealth Government arranged, in 1941-42, to purchase meat (particularly lamb) of export quality at prices below the United Kingdom contract rates (and later at those rates) for storage and re-sale to the Ministry of Food.

A Canning Committee of the Meat Board was set up in September, 1941, to assist in applying the Commonwealth Government's policy in regard to meat canning, and was succeeded in February, 1942, by the Commonwealth Meat Canning Committee constituted by regulation under the National Security Act. The Committee was under the direction of the Commonwealth Meat Controller from March, 1943, until 28th November, 1946, when its powers were transferred to the reconstituted Meat Board. Meat canning was encouraged by means of a subsidy paid out of the net proceeds of the Government's Meat Purchase Plan, and, after adjustment of the purchase prices, by the supply of beef at reduced prices and by the payment of higher prices for canned mutton and pig meats.

The extension of warfare to the Pacific Zone brought increased demands and to ensure adequate supplies for civil consumption, for Australian and Allied Services based on Australia, and for export, a Controller of Meat Supplies was appointed under National Security Regulations in March, 1943, and the meat industry as a whole was brought under Government control. A Deputy Controller was appointed in each State and advisory committees were appointed under the chairmanship of the Controller and Deputy Controllers, with whom the Meat Board co-operated. Upon its reconstitution on 28th November, 1946, and until the regulations ceased to have effect upon the expiry of the National Security Act on the 31st December, 1946, the Meat Board assumed and exercised the powers and functions of the Controller.

Measures were adopted also for the distribution of available supplies of meat on an equitable basis. Meat for civilian consumption was supplied to retail butchers, hotels, catering establishments and makers of smallgoods, etc., under a system of quotas. Distribution to householders remained in



the hands of the retailers until 17th January, 1944, when a system of rationing by coupons was brought into operation. The quantity provided under the coupon scale ranged from  $1\frac{1}{2}$  lb. to 4 lb. per person per week (half scale for children under nine years of age), according to the kind and cut of meat purchased. In February, 1945, the ration scale was amended with a view to reducing civilian consumption by about 9 per cent., and further reduction (except in the ration for children) equivalent to about  $12\frac{1}{2}$  per cent., was made as from 4th June, 1945.

Wholesale and retail prices of meat for local consumption became subject to control by the Commissioner of Prices as from 26th February, 1943.

#### *United Kingdom Contracts for Australian Meat.*

Following the outbreak of war in 1939 the United Kingdom Government made arrangements with the Commonwealth Government for the purchase of Australian meat. The initial contract dated from 30th September, 1939, and the sale or export of meat to any person in the United Kingdom other than the Ministry of Food was prohibited by regulation under the National Security Act. The contract was renewed annually until September, 1944, when the United Kingdom Government undertook to purchase the exportable surplus of Australian meat in the four years ending September, 1948. The undertaking covered all meat (beef, mutton, lamb, pig meats and offals) other than that required for Australian civil and Service needs, for British and Allied personnel based on Australia, for relief, and for supply to other markets as agreed upon by the two Governments. The quantity of pig meats to be taken under the contract in the last two years of the period was to be fixed by negotiation and for the year ending 30th September, 1947, was the exportable surplus. The Agreement envisaged the resumption of the chilled meat trade (with the proportion of chilled space to be determined) as and when the shipping position permitted. Prices under the long term contract are subject to review at the instigation of either Government in respect of the third or fourth years. Increases over the 1939 contract rates of approximately  $43\frac{1}{2}$  per cent. for lamb, 45 per cent. for mutton and 42 per cent. for beef were arranged for the year ending 30th September, 1947.

Canned meat was not included in the original Agreement, but in 1941, when it appeared likely that refrigerated shipping space for frozen meat would be severely restricted, contracts were made with the United Kingdom Government for the purchase of canned supplies. The quantity to be supplied in each year is the subject of annual negotiations.

#### *Prices of Meat under United Kingdom Contract.*

The schedule of prices under the United Kingdom contracts includes many kinds and grades of meat. The point of sale is on shipboard, Australian port, and costs of storage in Australia and expenses from store to shipboard are payable by the sellers.

The prices of the principal types of meat as at 1st January and 1st October, 1946, are shown on page 540; prices in periods from 1939-40 to October, 1945, were shown in the Year Books 1940-41, on page 821, and 1941-42 and 1942-43 on page 755.

TABLE 490.—United Kingdom Government Meat Contracts—Prices f.o.b. Australia.

Kind and Class of Meat.	As at 1st January, 1946.				As at 1st October, 1946.			
	1st Quality.		2nd Quality.		1st Quality.		2nd Quality.	
	Per lb. Sterling.	Per lb. Australian Currency.	Per lb. Sterling.	Per lb. Australian Currency.	Per lb. Sterling.	Per lb. Australian Currency.	Per lb. Sterling.	Per lb. Australian Currency.
<i>Lamb</i> —20 lb. to 28 lb. ... ..	d. 6 <sup>7</sup> / <sub>8</sub>	d. 7.97	d. 6 <sup>1</sup> / <sub>8</sub>	d. 7.58	d. 8 <sup>1</sup> / <sub>2</sub>	d. 10.41	d. 8 <sup>2</sup> / <sub>5</sub>	d. 10.19
29 lb. to 36 lb. ... ..	6 <sup>7</sup> / <sub>8</sub>	7.89	6	7.50	7 <sup>3</sup> / <sub>4</sub>	9.96	7 <sup>1</sup> / <sub>2</sub>	9.18
37 lb. to 42 lb. ... ..	6 <sup>1</sup> / <sub>2</sub>	7.81	5 <sup>7</sup> / <sub>8</sub>	7.03	7 <sup>3</sup> / <sub>4</sub>	9.74	6 <sup>1</sup> / <sub>2</sub>	8.51
<i>Mutton</i> —								
<i>Wethers and/or Maiden Ewe</i> —								
50 lb. and under ... ..	3 <sup>3</sup> / <sub>4</sub>	4.53	3 <sup>3</sup> / <sub>4</sub>	4.53	4 <sup>1</sup> / <sub>2</sub>	5.62	4 <sup>1</sup> / <sub>8</sub>	5.39
50 lb. to 72 lb. ... ..	3 <sup>3</sup> / <sub>4</sub>	4.22	3 <sup>3</sup> / <sub>4</sub>	4.22	4 <sup>1</sup> / <sub>2</sub>	5.46	3 <sup>3</sup> / <sub>4</sub>	4.84
<i>Beef</i> — <i>Ox and Heifer</i> —								
Hinds ... ..	5 <sup>5</sup> / <sub>8</sub>	6.48	4 <sup>3</sup> / <sub>4</sub>	5.94	5 <sup>1</sup> / <sub>8</sub>	7.11	5 <sup>1</sup> / <sub>2</sub>	6.56
Crops ... ..	3 <sup>1</sup> / <sub>2</sub>	4.38	3 <sup>7</sup> / <sub>8</sub>	3.98	4	5.00	3 <sup>1</sup> / <sub>2</sub>	4.61
<i>Porkers</i> —25 lb. to 50 lb. ... ..	9 <sup>5</sup> / <sub>8</sub>	11.64	8 <sup>1</sup> / <sub>2</sub>	11.17	9 <sup>5</sup> / <sub>8</sub>	11.64	8 <sup>1</sup> / <sub>2</sub>	11.17
<i>Baconers</i> — <i>Wiltshire sides</i> —								
50 lb. to 90 lb. ... ..	10	12.50	9 <sup>7</sup> / <sub>8</sub>	12.03	...	12.50	9 <sup>7</sup> / <sub>8</sub>	12.03
50 lb. to 80 lb. ... ..	...	...	...	...	10	12.50	9 <sup>7</sup> / <sub>8</sub>	12.03

PRICES OF MEAT.

Wholesale Prices of Meat—Sydney.

Comparative statements of average wholesale prices of meat delivered to butchers' shops in Sydney in each month of certain years since January, 1940, are shown in the next two tables. The particulars for the earlier years relate to prices quoted by the Metropolitan Meat Industry Commission, and the quotations from May, 1943, relate to prices fixed by the Prices Commissioner:—

TABLE 491.—Wholesale Prices of Beef, Sydney, Monthly, 1939 to 1946.

Month.	Ox Bodies, per lb.				Ox and Heifer (400 to 650 lb.) per lb.			
	1939.	1941.	1942.	1943.	1943.	1944.	1945.	1946.
January ... ..	d. 4.1	d. 6.0	d. 5.2	d. 6.4	d. ...	d. 5.5	d. 5.5	d. 5.5
February ... ..	3.9	5.1	5.3	5.8	...	5.5	5.5	5.5
March ... ..	4.5	4.8	5.4	5.3	...	5.5	5.5	5.5
April ... ..	4.3	4.5	5.1	5.1	...	5.5	5.8	5.5
May ... ..	3.8	4.3	4.9	5.5	5.8	5.5	5.8	5.5
June ... ..	3.6	4.6	5.2	5.4	5.6	5.5	5.8	5.5
July ... ..	4.0	4.7	5.9	5.4	5.6	5.8	5.8	5.5
August ... ..	3.9	4.9	5.9	5.5	5.8	5.8	5.8	5.5
September ... ..	4.2	5.0	5.8	5.5	5.8	5.8	5.8	5.5
October ... ..	4.2	5.0	5.5	5.5	5.7	5.8	5.8	5.5
November ... ..	4.1	4.9	5.7	5.2	5.5	5.6	5.7	6.3
December ... ..	4.1	4.9	6.1	5.2	5.5	5.5	5.5	6.3
Average ... ..	4.1	4.9	5.5	5.5	...	5.6	5.7	5.6

The wholesale price of beef (ox bodies) in 1940 and 1941 was on the average about  $\frac{3}{4}$ d. per lb. dearer than in 1939, and there was further increase of  $\frac{1}{4}$ d. per lb. in the average for the year 1942. Since the wholesale prices were fixed by the Prices Commissioner in May, 1943, the price of beef has fluctuated by about  $\frac{1}{4}$ d. per lb., and the average in 1945 and 1946 was slightly higher than in 1943. A statement showing the monthly average prices of mutton and lamb follows:—

TABLE 492.—Wholesale Prices of Mutton and Lamb, Sydney, Monthly, 1939 to 1946.

Month.	Mutton and Lamb, per lb.													
	1939.		1941.		1942.		1943.		1944.		1945.		1946.	
	M.	L.	M.	L.	M.	L.	M.	L.	M.	L.	M.	L.	M.	L.
January	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
February	3·3	6·4	4·2	7·3	3·3	5·9	4·1	7·6	4·5	7·0	4·5	7·4	5·0	7·7
March	4·0	7·4	3·7	6·0	3·7	5·9	4·1	7·7	4·0	7·0	5·2	8·5	5·5	9·4
April	3·4	7·0	3·2	5·4	3·3	5·9	4·1	7·7	4·0	7·0	5·2	8·7	5·5	9·6
May	3·3	6·3	2·9	5·6	4·0	6·2	3·9	7·5	4·3	7·3	5·3	8·8	5·5	9·6
June	2·9	6·0	3·4	5·7	5·0	7·4	4·0	7·1	5·4	8·7	5·5	9·0	5·5	9·6
July	3·1	6·4	3·3	5·6	5·7	8·4	4·1	7·2	5·5	8·8	5·5	9·0	5·4	9·3
August	2·9	6·0	3·1	5·2	5·3	7·4	4·5	7·3	5·4	8·6	5·5	8·9	5·0	8·8
September	3·2	6·3	3·8	6·2	4·0	7·0	4·6	7·6	5·0	8·0	5·5	8·6	5·0	8·8
October	3·2	6·4	3·4	5·8	4·1	6·9	4·5	7·9	4·9	7·4	5·0	7·6	5·0	8·8
November	3·5	5·9	3·4	5·6	3·6	6·9	4·5	7·4	4·6	7·4	5·0	7·3	5·5	10·0
December	3·3	5·2	3·1	5·6	3·7	7·1	4·5	7·0	4·5	7·4	5·0	7·3	5·5	10·0
Average	3·3	6·3	3·4	5·9	4·1	6·9	4·2	7·4	4·7	7·6	5·2	8·2	5·3	9·2

M—Mutton; L—Lamb.

The average prices of mutton and lamb in Sydney in 1946 were respectively 2d. and nearly 3d. per lb. dearer than in 1939, and 1d. and almost 2d. per lb. dearer than in 1943.

#### VALUE OF PASTORAL PRODUCTS EXPORTED.

The total value of pastoral products or by-products (apart from dairy and farmyard products) exported overseas from New South Wales is shown in the following table:—

TABLE 493.—Exports of Pastoral Products, 1938-39 to 1945-46.

Products.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
	£000	£000	£000	£000	£000	£000	£000	£000
Wool	17,221	24,562	17,128	22,536	16,302	14,659	15,153	24,293
Meat	1,545	2,874	3,426	3,206	3,859	4,454	4,239	3,526
Live Stock	67	91	113	16	10	12	6	54
Other	2,223	2,911	2,730	3,198	1,897	3,764	3,415	5,512
Total	21,056	30,438	23,397	28,956	22,068	22,889	22,813	33,385
Proportion to total exports (Merchandise)	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
	58·0	58·9	48·6	53·5	42·6	44·1	39·2	45·4

Figures relating to value of pastoral exports are not comparable with those relating to the value of production which follow, since they contain items which have been enhanced in value by manufacture and other processes. Moreover, the exports are valued on the basis of f.o.b. Sydney and not at the place of production, and the figures relate to year of export, not to year of production.

## VALUE OF PASTORAL PRODUCTION.

The farm values of pastoral production from the different kinds of stock as estimated for various years since 1901 are shown in the following table:—

TABLE 494.—Value of Pastoral Production, 1901 to 1945-46.

Year.	Sheep.			Cattle.		Horses.	Total.	Per head of Population.
	Wool.	Slaught- ered.	Exported.	Slaught- ered.	Exported.			
	£000	£000	£000	£000	£000	£000	£000	£ s. d.
1901	8,425	2,071	...	1,229	...	722	12,447	9 2 1
1911	14,085	2,811	...	1,689	...	2,001	20,586	12 7 3
1920-21	13,023	2,313	...	2,973	...	2,027	20,336	9 14 7
1928-29	30,879	2,801	1,576	5,814	(—) 583	192	40,679	16 7 6
1929-30	18,099	2,732	1,243	4,508	(—) 334	107	26,355	10 8 3
1930-31	13,705	1,795	364	2,767	(—) 899	103	17,835	7 0 2
1931-32	15,233	1,543	373	2,632	(—) 565	115	19,331	7 10 7
1932-33	16,659	1,113	911	2,615	(—) 69	144	21,373	8 5 0
1933-34	29,951	2,268	733	2,585	(—) 1,020	145	34,662	13 5 3
1934-35	18,045	3,352	421	2,896	(—) 1,001	218	23,931	9 1 8
1935-36	25,408	3,152	1,229	3,780	(—) 78	150	33,641	12 13 3
1936-37	32,091	4,357	805	3,721	(—) 843	175	40,306	15 0 8
1937-38	24,060	4,794	1,718	4,735	(—) 225	175	35,257	13 0 4
1938-39	17,076	3,537	197	4,495	(—) 586	175	24,894	9 2 1
1939-40	28,283	3,317	(—) 1	4,598	(—) 822	175	35,550	12 17 7
1940-41	27,127	4,513	589	4,753	(—) 439	175	36,718	13 3 11
1941-42	27,458	3,964	647	5,312	(—) 2,050	175	35,506	12 13 5
1942-43	29,154	6,229	719	5,945	(—) 2,715	175	39,507	13 19 1
1943-44	31,703	7,251	718	6,877	(—) 2,623	210	44,136	15 9 2
1944-45	26,112	7,510	849	6,531	(—) 2,543	238	38,697	13 8 4
1945-46	25,234	7,375	(—) 253	5,966	(—) 3,136	240	35,426	12 3 3

(—) Denotes excess of imports.

It is estimated that the value of the principal materials used in the pastoral industry was £1,295,000 in 1942-43, £1,556,000 in 1943-44, £1,245,000 in 1944-45, and £1,383,000 in 1945-46.

## NOXIOUS ANIMALS.

The only large carnivorous animals dangerous to stock in Australia are the dingo, or so-called native dog, and the fox, which has been introduced from abroad; but graminivorous animals, such as kangaroos, wallabies, hares, and rabbits, particularly the last-named which are of foreign origin, are deemed by the settlers even more noxious. In the Western division the Western Lands Commissioner is required to take measures to destroy dingoes, and to maintain a dog-proof fence along the western border. A small rate is imposed on the land to pay expenses.

*Rabbits.*

The rabbit pest has been brought under control by landholders in many parts of the State and the damage caused by rabbits is compensated to some extent by the use of rabbits for food and of the skins in manufactures, locally and for export.

Under National Security Regulations (continued in force to 31st December, 1947, by the Defence (Transitional Provisions) Act, 1946), the trade in rabbitskins has been controlled since June, 1940, to ensure adequate

supplies of skins to local manufacturers at reasonable prices. Rabbitskins bought at auction by manufacturers for normal domestic requirements and for Service contracts are appraised and the manufacturers are compensated for any excess of open market over appraised prices from the proceeds of a levy on rabbitskins exported.

The following table shows the quantity and value of frozen rabbits and hares, and of rabbit and hare skins exported from New South Wales to countries outside Australia:—

TABLE 495.—Rabbits and Hares—Oversea Exports, 1911 to 1945-46.

Year ended 30th June.	Exports Oversea.				
	Frozen Rabbits and Hares.		Rabbit and Hare Skins.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	pairs.	£	lb.	£	£
1911* ... ..	6,806,246	330,741	5,795,839	295,476	626,217
1921 ... ..	2,830,315	301,615	3,387,480	609,570	911,185
1926 ... ..	3,510,311	340,171	11,044,446	2,231,637	2,571,808
1931 ... ..	3,526,033	252,074	4,679,429	415,245	667,319
1936 ... ..	1,442,087	83,998	6,177,386	1,157,753	1,241,751
1937 ... ..	330,627	30,013	4,195,796	1,007,870	1,037,883
1938 ... ..	224,027	19,362	2,753,341	647,611	666,973
1939 ... ..	324,362	27,531	1,661,935	197,707	225,238
1940 ... ..	695,474	52,759	3,718,616	491,440	544,199
1941 ... ..	233,390	20,366	4,444,529	1,075,737	1,096,103
1942 ... ..	45,964	3,856	4,148,045	1,655,848	1,659,704
1943 ... ..	27,235	2,634	2,735,779	950,071	952,705
1944 ... ..	94,298	10,034	5,119,842	2,255,580	2,265,614
1945 ... ..	72,091	9,122	5,247,467	1,909,908	1,919,030
1946 ... ..	146,377	19,631	7,618,708	3,271,092	3,290,723

\* Calendar Year.

The export trade in frozen rabbits and hares has dwindled to small proportions. The volume of skins exported is subject to pronounced fluctuation, and was greater in 1945-46 than in any year since 1928-29, with the value (£3,271,092) the highest ever recorded.

#### *Wire-netting Advances for Rabbit-proof Fences.*

Under the Pastures Protection Act, 1934, advances from funds provided by Parliament may be made to settlers for the purchase of wire netting or other materials for use in the construction of rabbit-proof or dog-proof fences, etc., for protection from and the destruction of noxious animals. Payment for these materials, etc., with interest, is made by annual instalments extending over such period as the Minister for Lands may determine.

No advances have been made since 1941-42. The aggregate amount of advances to 30th June, 1946, was £1,440,334, and the balances outstanding at this date amounted to £235,291.

#### PASTURES PROTECTION BOARDS.

For the purpose of administering the Pastures Protection Act which relates to travelling stock, sheep brands and marks, destruction of rabbits and noxious animals, and certain other matters, the State is divided into

Pastures Protection Districts, and in each there is constituted a board of eight directors, elected every three years from among their own number by landholders who pay pastures protection rates. There are also stock inspectors and rabbit inspectors, who are paid from the funds of the Pastures Protection Boards to which they are attached.

Rates to provide funds for the purposes of the boards are levied upon owners of ten or more head of large stock, or 100 or more sheep, at a rate not exceeding fourpence per head of large stock and one half-penny per head of sheep, but a rebate of one-half may be made to occupiers of holdings enclosed with wire-netting fences which in the opinion of the board are rabbit-proof, provided the holdings have been kept reasonably free from rabbits during the preceding calendar year. The funds so raised may be applied by the boards in defraying expenses incurred in administering the Act, and for any other purpose approved by the Minister. The boards are required each year to pay 3 per cent. of their revenue to the Colonial Treasurer to cover the cost of administration.

The boards levy rates on travelling stock in the Eastern and Central Divisions to constitute a fund for the improvement of travelling stock and camping reserves. They are empowered also to erect rabbit-proof fences as "barrier" fences wherever they deem necessary, to pay a bonus for the scalps of noxious animals, and to enforce the provisions for the compulsory destruction of rabbits.

#### REGISTRATION OF BRANDS.

Stock brands are registered under the Registration of Stock Brands Act, and the number of standing registrations of large stock brands is approximately 76,000. These brands may be used on either cattle or horses.

Sheep brands, of which the registrations are approximately 44,000, are issued for Pastures Protection Districts and may not be duplicated in any one district; the same brand may, however, be issued in several Pastures Protection Districts.

#### ANIMAL HEALTH.

Diseases of various kinds exist amongst live stock in New South Wales, but it is free from many of the more serious epizootic and parasitic diseases which cause heavy loss in other pastoral countries, *e.g.*, rinderpest, foot and mouth disease, rabies, glanders, sheep scab, and trypanosomiasis. Certain diseases are notifiable under the Stock Diseases Act, 1923-1934, and necessary powers are provided for the inspection of stock and for the detention, seizure, treatment, quarantine and destruction of diseased stock.

The work in connection with the inspection of stock for disease is administered by the Animal Industry Division of the Department of Agriculture. Veterinary officers and inspectors of stock are stationed throughout the country, under supervision of district veterinary officers, enabling diseases such as anthrax and pleuro-pneumonia to be dealt with expeditiously. Cattle on dairies, particularly those supplying milk for human consumption, are inspected rigorously.

Schemes for the creation of tubercule-free herds are in operation in various parts of the State, and it is required by the Milk Board that raw milk sold in Sydney or Newcastle must be the product of tubercule-free cows.

Work at the well-equipped veterinary research station at Glenfield, under the control of the Director of Veterinary Research, is co-ordinated with the work of the veterinary officers in the field.

At the McMaster Animal Health Laboratory located in the grounds of the University of Sydney, extensive scientific investigation of matters affecting animal health is undertaken by the Council for Scientific and Industrial Research in co-ordination with similar activities in other States and the Faculty of Veterinary Science of the University of Sydney. The Council acquired an area of 1,250 acres at St. Mary's which is used mainly as a field station in connection with the laboratory and for genetic work on sheep.

Movements of livestock interstate are controlled, and inspectors are maintained where required along the borders. This work is of particular importance along the Queensland border owing to the presence of cattle tick. Power is provided to enforce the dipping of cattle before they enter New South Wales.

#### *Cattle Tick Eradication.*

Cattle tick eradication is a difficult problem confronting the veterinary authorities. Restrictive efforts have confined the infestation to a relatively small part of the State, and reduced the occurrence of tick fever to isolated instances. Continuous and costly work is necessary to prevent the spread of the tick, and under an arrangement, the Commonwealth Government shares the cost with the States of New South Wales and Queensland. Contributions by the Commonwealth totalled £53,325 in each of the years 1944-45 and 1945-46, the New South Wales share of which was £27,330 in 1944-45 and £44,342 in 1945-46. These amounts included grants for the construction of dips. The Cattle Tick Control Commission created in 1926 has brought about increased co-ordination between the authorities of the States concerned. Dips are provided by the Government, and private dips constructed in accordance with the plans and specifications of the Department are subsidised.

#### *Swine Compensation Act, 1928.*

Following an outbreak of swine fever in 1928, the Swine Compensation Act was passed to provide for the payment of compensation for pigs condemned on account of the presence of certain diseases and for carcasses condemned in slaughter-houses as unfit for human consumption. The funds required for payment of compensation are collected by the sale of swine duty stamps, which are affixed to a register kept at each slaughtering establishment to indicate the number of pigs slaughtered. In this way information is obtained as to the herds likely to be affected with tuberculosis.

During 1944-45 receipts under the Act amounted to £19,633 (excluding £14,000 advanced to the fund by the Treasurer) and disbursements to £29,841, of which £29,779 was paid as compensation. In 1945-46 receipts were £25,071, and disbursements £29,276 including £29,199 compensation.

#### *Veterinary Surgeons Act, 1923.*

The Veterinary Surgeons Act came into operation on 5th December, 1923, to provide for the registration of veterinary surgeons, and to regulate the practice of veterinary science. A Board of Veterinary Surgeons has been established to administer the Act, which specifies the qualifications for registration and prohibits practice by unregistered persons.

The number of registered veterinary surgeons increased from 192 on 31st December, 1943, to 237 on 30th June, 1946.

## DAIRYING, POULTRY, Etc.

The development of dairying as a national industry in Australia was slow until, towards the end of the 19th century, the introduction of refrigeration enabled producers to overcome disabilities in manufacturing and distributing perishable dairy products in a warm climate, and to export the surplus oversea. Pasteurisation and the application of machinery to the treatment of milk and the manufacture of butter, the development of the factory system, and improvements in regard to ocean transport have enabled production to expand. Butter has become an important item of the export trade.

The nature of the soil, the mild climate, and abundant rainfall in the coastal portions of New South Wales are most suitable for the maintenance of dairy herds. Natural pasture is generally available throughout the year, and dairy cattle do not require housing to maintain production during winter months.

In the inland districts dairy-farming is undertaken mainly to supply local needs, and a number of well-equipped factories has been established in proximity to towns. Dairying is conducted also on the Murrumbidgee irrigation areas. The principal regions in which dairying is an important industry are indicated in the diagrammatic map at page 9 of this Year Book.

In the coastal division 15,204 holdings were used for dairying in 1945-46, viz., 11,075 exclusively and 4,129 for dairying combined with other purposes. In the other parts of the State, the industry is conducted usually in conjunction with agriculture and grazing—there being only 1,082 holdings used solely for dairying and 1,818 for dairying in combination with other rural pursuits. The total number of holdings used for dairying in New South Wales decreased from 20,704 to 18,104, or by 2,600 between 1939-40 and 1945-46; the decrease in the Coastal Division was 1,764.

Most of the native grasses of the State are particularly suitable for dairy cattle, as they possess milk-producing as well as fattening qualities. Imported grasses are planted also to increase the carrying capacity of the land and the milk yield per cow. In the winter the herbage is supplemented by fodder crops, such as maize, barley, oats, rye, lucerne, and the brown variety of sorghum, or the planter's friend. Ensilage also is made for fodder. The extent of fodder conservation of this type is indicated in Table 356. A large extent of land has been sown with grasses to be used mainly as food for dairy cattle. The practice of manuring pastures has extended in dairying districts. Particulars of the use of manures on pastures are shown in Table 353.

### SUPERVISION OF DAIRYING AND DAIRY PRODUCTS.

Legislation relating to dairying and dairy products has been enacted by the State and the Commonwealth to provide for the supervision of production and distribution and for organised marketing.

The State Acts are the Dairies Supervision Act, 1901-1930; the Dairy Industry Act, 1915-1940; and the Dairy Products Act, 1933-1938. Legislation relating to the milk supply of Sydney and Newcastle, which is supervised by the Milk Board, is described in the chapter "Food and Prices".



The Federal Acts are concerned mainly with the export trade, viz., the Commerce (Trade Descriptions) Act, 1905-1933; the Dairy Produce Export Control Act, 1924-1942; the Dairy Produce Export Charges Act, 1924-1937; and the Dairying Industry Assistance Act, 1943. National Security Regulations were issued by the Commonwealth from time to time to meet war emergency conditions affecting the industry, and of these the Dairy Produce Acquisition Regulations were continued in force to 31st December, 1947, by the Defence (Transitional Provisions) Act, 1946. Details of these are given at a later page.

The Dairies Supervision Act, 1901-1930, consolidated laws designed to prevent the spread of disease through unhygienic conditions in the handling of milk and milk products. It requires all dairymen and milk vendors to register their premises with local authorities, renders the premises subject to inspection, and makes illegal the sale of milk or milk products from unregistered premises.

By the Dairy Industry Act provision is made for regulating the manufacture of dairy produce and of margarine. Dairy produce factories and stores must be registered. Cream supplied to a dairy factory must be tested and graded at the factory, and the farmer is paid on the basis of the butter-fat content, or on the amount of commercial butter obtained from his cream. Butter must be graded on a uniform basis and packed in boxes bearing registered brands indicating the quality of the product and the factory where it was produced. The testing and grading at the factory may be done only by persons holding certificates of qualification. In 1938 a Dairy Produce Factories Advisory Committee was constituted to advise the Minister regarding applications for registration of premises as a dairy produce factory. The Minister may refuse any application if he is satisfied that registration is opposed to the best interests of the dairying industry in New South Wales.

The State has been divided into ten dairying districts, and in each an experienced dairy instructor is appointed to supervise the dairy factories and to administer the Dairy Industry Act and regulations thereunder. He acts as inspector, instructs the factory managers and cream-graders in matters connected with the industry, advises the dairy-farmers, exercises supervision over the quality of butter produced and organises herd recording units.

The Dairy Products Act, 1933-1938, relates to the Australian equalisation scheme described below. The Act is administered by the New South Wales Dairy Products Board, which consists of a Government representative appointed by the Minister for Agriculture and six other members representing the proprietary and co-operative manufacturers and the Primary Producers' Union. The Board advises the Minister in determining the quotas of butter and cheese for home consumption, and may enter into arrangements with boards in other States for the purposes of stabilisation. Its administrative expenses are met by imposing a fee of 1s. per ton of butter and 6s. per ton of cheese manufactured.

The supervision of dairy products for oversea export in terms of the Dairy Produce Export Control Act, 1924-42, is a function of the Australian Dairy Produce Board appointed by the Commonwealth to control the export and oversea distribution of Australian butter and cheese. The board was reconstituted in February, 1936, and assumed functions formerly exercised by the Australian Dairy Council for the improvement of dairying in Australia. The board issues licenses to exporters of butter and

cheese and maintains an agency in Great Britain to advise as to market conditions, etc. Expenses of administration are paid from proceeds of a small levy on butter and cheese exported.

Butter for export is graded by Commonwealth official graders, according to grades fixed by regulation, and each box is branded to indicate the quality of the butter and the factory in which it was made. A national brand (the kangaroo) is stamped on all boxes of "choicest" quality butter. The trade description for "choicest" must contain the word "Australia" in the centre of an outline map of Australia; the name of the State; the registered number of the factory; and the net weight. In addition, a word registered by the factory may be added to the approved design. Only a very small proportion of the Australian butter is classified as second or lower grade.

The Dairying Industry Assistance Act, 1943, provides for the granting of assistance to producers and the determination by the Commonwealth Court of Conciliation and Arbitration of rates of wages and other conditions of employment in the industry.

#### WAR-TIME CONTROL OF DAIRY PRODUCTS.

Under National Security (Dairy Products Acquisition) Regulations, operative since 29th November, 1939, all butter and cheese for export to the United Kingdom has been acquired, stored and shipped by the Dairy Produce Control Committee appointed to act for the Commonwealth Government. The Committee comprises representatives of the Government and the dairying industry and its chairman is also chairman of the Dairy Produce Board.

Because of the shortage of refrigerated shipping space in 1941-42 the United Kingdom Government could accept under its contract with the Commonwealth only choicest and first-grade butter in reduced quantities and sought increased quantities of cheese. Accordingly the Dairy Produce Control Committee assisted manufacturers to change from butter to cheese production, provided emergency cold storage and made advances against butter and cheese in cold storage for export or home consumption.

As from 31st December, 1941, the stock and output of low-grade butter excluded from the contract were acquired by the Government. Later, when means to convert lower grade butter into dried butter fat were evolved, the United Kingdom Government agreed to take all the dried butter fat produced in 1942-43. In that season the quantity of butter available for export was greatly reduced by increased demands of Australian and Allied Services, and the effects of the unfavourable season and of war-time difficulties in the industry. Consequently second grade butter was accepted again under the contract towards the end of 1942 and pastry butter was accepted in 1943. The exportable surplus decreased further in 1943-44 and 1944-45 but increased in 1945-46.

All supplies of dairy products were brought under Commonwealth control in 1943, when a Commonwealth Controller of Dairy Products and a Dairy Industry Advisory Committee in each State were appointed. The consumption of butter by civilians was rationed as from 7th June, 1943; the ration of 8 oz. per person per week was reduced to 6 oz. in June, 1944.

For administrative expenses of the Dairy Produce Control Committee deductions are made from proceeds of butter and cheese shipped. The rates per cwt. were 12½d. on butter and 6½d. on cheese until reduced in August, 1944 to 7½d. and 3½d., respectively. A special deduction of 3s. 1d. per cwt.

of butter was made in 1941-42 to provide funds to assist manufacturers to change from butter to cheese production. During the years 1941-42 to 1943-44 a further deduction of 8½d. per cwt. of butter shipped to the Ministry of Food was paid to a special fund to meet the cost of emergency cold storage.

*United Kingdom Purchase of Australian Dairy Products.*

Following the outbreak of war in September, 1939, the United Kingdom Government contracted with the Commonwealth Government to purchase large quantities of Australian butter and cheese during the period ended 30th June, 1940. The contract was renewed year by year until June, 1944, when the Commonwealth Government agreed to make available to the United Kingdom Government in the four years from 1st July, 1944, to 30th June, 1948, the exportable surplus of Australian dairy produce after providing for Australian consumption and meeting certain specified commitments. Information as to the contract prices to 30th June, 1947, is shown later in this chapter. Prices for the year 1947-48 were subject to review before 1st May, 1947. The quantities of butter and cheese exported from Australia to the United Kingdom under contract from the date of first acquisition (20th November, 1939) to 30th June, 1946, are shown below:—

			1939-40.*	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
			tons.	tons.	tons.	tons.	tons.	tons.	tons.
Butter	...	...	66,882	77,843	46,847	48,911	41,564	37,356	58,738
Cheese	...	...	11,063	10,118	6,569	6,067	3,756	2,700	8,621

\* From 20th November, 1939.

*The Australian Equalisation Scheme.*

A voluntary marketing scheme known as the "Paterson Plan" was inaugurated in Australia on 1st January, 1926, as an outcome of efforts towards stabilisation in the various butter-producing States. Information regarding the scheme is given in the 1934-35 edition of the Year Book at page 530.

As from 1st May, 1934, the Paterson plan which applied to butter only was superseded by a compulsory equalisation scheme in terms of legislation passed by the States of New South Wales, Victoria, Queensland, Tasmania and South Australia and the Dairy Produce Act of the Commonwealth. The scheme included butter of South and Western Australia from April, 1946, but does not cover Western Australia cheese. The State Acts provide for the determination of the proportion or quota of butter and cheese made in each State which manufacturers may sell within the State. The Federal law provided for the determination of corresponding export quotas. In 1936 the Privy Council decided that the Commonwealth had not the power in terms of the Constitution to control the interstate movement of products. But the legislation of the States was not invalidated and the scheme has been continued by the voluntary co-operation of producers.

For the administration, members of the Dairy Products Boards of the States concerned and other persons representing manufacturers of dairy products were organised in 1934 as a limited company—the Commonwealth

Dairy Produce Equalisation Committee Ltd. The Committee enters into agreements with manufacturers so as to secure to them equal rates of returns from sales of dairy produce, and fixes basic prices at which dairy produce sold for local consumption in Australia or export is to be taken into account for equalisation.

A practical effect of the scheme is that the local trade, which usually has been the more remunerative, and the export trade are distributed in equitable proportions amongst the manufacturers by means of quotas. The proceeds of sales of butter are equalised as between factories, the "quota" being the proportion of output upon which the local price is paid to each factory.

The quotas for butter and cheese and the values at which sales are taken into account for equalisation are identical in all the States concerned in the scheme. The quotas for local consumption in each month, since July, 1941, are shown in the following statement:—

TABLE 496.—Butter and Cheese Quotas for Local Consumption.

Month.	Butter.						Cheese.					
	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
July ...	64	84	86.66	98	96.3	98.48	61	68	88	96.66	96.8	66.04
August ...	57	76	81.25	92.32	84.4	76.43	47.5	50	70	75	68	51.29
September ...	51	53	66	61.5	60.0	52.68	36	43	59	51.5	48.65	42.27
October ...	46	41	45	40	44.25	45.22	28	33.33	49	37.25	35.5	39.35
November ...	45	39	41	33.33	48.27	42.16	20	31	42	36	40.82	22.37
December ...	38	38	37.33	35.66	45.76	46.46	20	34	46	39.5	42.86	28.42
January ...	37	44	44	41.25	46.43	54.24	37	42.5	55	53	58.06	40.02
February ...	46	47	60	81.25	57.95	51.93	45	52	66.66	79	75	36.85
March ...	47	58	67	89.66	59.76	48.61	42	61	75	86.8	78.26	41.04
April ...	56	68	79	96.3	70.59	55.85	44	86	97	97	96.04	48.88
May ...	70	86	93.75	96.3	81.05	68.55	68	88	97	96.5	96.67	56.58
June ...	85	87.5	95	96.3	75.97	78.06	63	96	97	98.2	94.94	55.32

Under normal conditions the requirements for home consumption do not vary greatly from month to month, and variations in the quota are the result of variations in production.

Butter and cheese for local consumption and export overseas respectively are taken into account at basic prices determined for each equalisation period by the committee and the realisations of individual factories are equalised on the basis of the average price covering all sales on all markets.

Basic prices for equalisation purposes were determined monthly until 1942, when manufacturers agreed to the substitution of equalisation periods based on seasons. The first seasonal period under the new plan was the months March to June (inclusive), 1942. In April, 1945, when prices fixed under the long term agreement with the United Kingdom were applied to butter and cheese, the equalisation period was extended to twelve months (see page 552).

The average equalisation values determined by the Equalisation Committee in each year since the commencement of the scheme are shown below; the values are stated as per cwt. of commercial butter.

TABLE 497.—Butter—Equalisation Values, 1934-35 to 1945-46.

Year ended June.	Average Equalisation Value per cwt.	Year ended June.	Average Equalisation Value per cwt.	Year ended June.	Average Equalisation Value per cwt.
	s. d.		s. d.		s. d.
1935	101 6	1939	136 3	1943	152 0
1936	117 5	1940	141 10	1944	153 0
1937	123 2	1941	143 1	1945	154 4
1938	136 6	1942	145 5	1946	172 3*

\* Interim.

The average in each year represents the net return to the factories at agent's floor, Australian port of shipment or other recognised centre of distribution. The values provide the basis on which payments are made by the factories to dairy farmers who supply milk or cream for manufacture. Government subsidy, paid in 1942-43 and later seasons, is not included in the values.

The upward trend in equalisation values of butter since 1938-39, was due firstly to a decline in production and consequent diminution in the quantity available for export at values which in that period were lower than local prices, and secondly, to an increase of 1d. per lb. in local price as from 6th March, 1942. The increase in 1945-46 was due to increased prices under the contract with the United Kingdom Government.

*Government Assistance to the Dairying Industry.*

To encourage dairy farmers to maintain production at an adequate level the Commonwealth Government has subsidised dairy production. Dairy farmers supplying cream and milk to butter and cheese factories in the period 1st July, 1942, to 31st March, 1943, were subsidised under the Dairy Industry Assistance Act, 1942. Producers who, during this period, supplied milk to manufacturers of processed milk products were assisted by means of temporary increases in prices of these goods. As from 1st April, 1943, they were subsidised under the Dairy Industry Assistance Act, 1943.

Subsidy was paid at rates calculated to raise returns to dairy farmers to an average price varying according to accepted costs of production, but in 1946-47 covering also the amount accrued from the export of butter at a price in excess of accepted production costs. The objective return to producers, inclusive of subsidy, as adopted from time to time since 1st July, 1942 was:—

Return per lb. Commercial Butter Equivalent.				
From 1-7-42 to 31-3-43.	From 1-4-43 to 31-3-42.	From 1-4-44 to 31-10-45.	From 1-11-45 to 31-3-46.	From 1-4-46 to 31-3-47.
pence. 17·5	pence. 18	pence. 19·31	pence. 19·5	pence. 19·97

An account of the arrangements relating to the subsidising of dairy products and of the subsidy paid in the seasons ended March, 1943 to

1946, was given at pages 766 to 778 of the Year Book for 1941-42 and 1942-1943.

For the season ended March, 1947, no seasonal subsidy was provided, but the principle was followed again of meeting by subsidy the difference between equalisation value and the objective return to producers as related to cost of production—in this year 200s. 8d. per cwt. of butter or its equivalent in cheese. In addition manufacturers were paid 4s. 5d. per cwt. to distribute that portion of the contract price of export butter in excess of the amount necessary to ensure the return of 200s. 8d. per cwt. to producers. Under these arrangements interim subsidy was paid at rates of 20s. per cwt. of butter and 9s. 11.296d. per cwt. of cheese.

The Commonwealth Government was reimbursed by the United Kingdom Government for actual subsidy paid on exports of butter and cheese on its account from 1st April, 1943, to 30th June, 1944, and on exports of processed milk from 1st April, 1944. During the first two years of the long term contract (1st July, 1944, to 30th June, 1946) the amount received for butter and cheese, which was divided into two parts—"price" and "value" or "grant"—was sufficient to provide a return to producers of 1s. 7.31d. per lb. commercial butter exported. The Commonwealth Government was not reimbursed by the United Kingdom Government for the proportion attributable to exports of the special subsidy paid from May to October, 1945, or the increase in basic subsidy paid from 1st November, 1945, to 30th June, 1946.

The following summary shows the rates of Commonwealth Government subsidy on butter made in New South Wales factories; the rates are stated as per pound of commercial butter:—

TABLE 498.—Butter Subsidies, New South Wales, 1st July, 1942, to 31st March, 1947.

Period of Subsidy.	Rate per lb. of Commercial Butter.			
	Basic Subsidy.	Seasonal Subsidy.	Special Subsidy.	Total Subsidy.
	d.	d.	d.	d.
1st July, 1942, to 31st March, 1943 ... ..	861	.....	.....	861
1st April, 1943, to 31st March, 1944 ... ..	3·8	.....	.....	3·8
1st April, 1944, to 31st May, 1944 ... ..	3·5	1·839	.....	5·339
1st June, 1944, to 31st October, 1944 ... ..	3·5	1·826	.....	5·326
1st November, 1944, to 28th February, 1945 ... ..	3·5	.....	.....	3·5
March, 1945 ... ..	3·5	1·826	.....	5·326
April, 1945 ... ..	2·384	2·213	.....	4·597
1st May, 1945, to 31st August, 1945 ... ..	2·384	2·213	2·0	6·597
September, 1945 ... ..	2·384	2·213	1·0	5·597
October, 1945 ... ..	2·384	.....	1·0	3·384
1st November, 1945, to 28th February, 1946 ... ..	2·824	.....	.....	2·824
March, 1946 ... ..	2·824	2·213	.....	5·037
1st April, 1946, to 31st March, 1947 ... ..	2·143	.....	.....	2·143

Subsidy has been provided on cheese and other dairy products manufactured in Australia at rates calculated to ensure to dairy farmers a return equivalent to that available to them in respect of butter.

#### *Fresh Milk Subsidies.*

The Commonwealth Government provides subsidy on fresh milk for human consumption similar in character to subsidies on manufactured dairy products. Subsidy on fresh milk supplied for the metropolitan and Newcastle districts in the area under the administration of the Milk Board (N.S.W.) was commenced on 14th April, 1944. The price to suppliers at

country factory was fixed at 1s. 4d. per gallon and the rate of basic subsidy was 4½d. per gallon during the months March to August, inclusive, and 3d. a gallon in February and September, no basic subsidy being provided in the four months October to January.

Special subsidy and a guarantee of income from milk was given producers in the Milk Act area in 1944-45 to offset effects of severe drought, as indicated at page 769 of the Year Book for 1941-42 and 1942-43, and these producers were eligible also for the subsidy of 2d. per gallon from May to August and 1d. per gallon in September and October, 1945, paid throughout the State.

Because of adverse seasonal conditions producers in the Milk Act area were given a special subsidy of 3d. per gallon for milk produced in January, 1946, and were each guaranteed an income from milk production in the seven months ended January, 1946, equal to that gained in the corresponding months of 1944-45. Up to the 30th June, 1946, payments under this equal income plan were £25,083, of which 60 per cent. was paid by the Commonwealth and the remainder by the State.

Details of the subsidy paid in respect of milk delivered for consumption as whole or liquid milk in the Metropolitan and Newcastle districts are shown in the following table:—

TABLE 499.—Rates of Subsidy on Whole Milk Supplies—Metropolitan and Newcastle Districts (N.S.W.), 1944 to 1946.

Period.	Subsidy per gallon.			Period.	Subsidy per gallon.		
	Basic.	Special.	Total.		Basic.	Special.	Total.
	d.	d.	d.		d.	d.	d.
1944—Apr. 14—Aug. 31...	4-5	...	4-5	1945—Mar. 2—Apr. 26 ...	4-5	...	4-5
Sept. 1—14 ...	3-5	...	3-5	Apr. 27—Aug. 30...	4-5	2-0	6-5
Sept. 15—28 ...	3-0	...	3-0	Aug. 31—Sept. 27 ...	3-0	1-0	4-0
December ...	...	4-5	4-5	Sept. 28—Nov. 1 ...	...	1-0	1-0
1945—January ...	...	4-5	4-5	1946—January 4—31 ...	...	3-0	3-0
Feb. 1—Mar. 1 ...	3-0	1-5	4-5	Feb. 1—28 ...	3-0	...	3-0
				Mar. 1—Aug. 29 ...	4-5	...	4-5
				Aug. 30—Oct. 3 ...	3-0	...	3-0

Particulars of the amounts of subsidy paid under the arrangements described above in respect of milk delivered for consumption in the districts under the administration of the Milk Board including payments under the 1944-45 income scheme are as follows:—

Payments in respect of—	Year ended June.	Basic Subsidy.	Special Subsidy.	Total.
		£	£	£
Milk supplied to Milk Board for consumption in Metropolitan and Newcastle ...	1944*	(20,864)†	...	(20,864)†
	1945	489,761	132,877	622,638
	1946	541,478	185,584†	727,062
Milk sold in local country towns or retailed by producer—vendors ...	1944*	(4,224)†	...	(4,224)†
	1945	171,626	43,746	215,372
	1946	(179,950)	(55,238)	(235,188)
Total subsidy—Milk Act area ...	1944*	(25,088)†	...	(25,088)†
	1945	661,387	176,623	838,010
	1946	(721,428)	(240,822)†	(962,250)

\* Subsidy applied in this year from 14th April. † Revised. Figures in parentheses are approximate.

‡ Includes drought relief paid under income scheme, 1944-45, £43,091.

The Milk Act area from which Metropolitan and Newcastle supplies are obtained embraces the greater part of the Hunter-Manning Division, the

Metropolitan Division, the northern section of the South Coast Division, and a small part of the Central Tablelands Division.

Subsidy for whole milk supplies for human consumption in other parts of New South Wales was introduced in June, 1944. Maximum prices of milk in defined areas were determined by the Prices Commissioner and seasonal subsidy was provided for the months of low production. The defined areas are grouped as follows:—the “North and South Coast areas” embrace the coastal districts not included in the Milk Act area; the “Southern Tablelands area” is the Southern Tableland Division with the addition of the Australian Capital Territory (and from 1st April, 1946, Tallaganda Shire); the “Tablelands area” comprises the divisions of the Northern Tableland and Central Western Slopes, also the balance of the South-Western Slopes division not included in the “Special Milk Area” or the “South Western Slopes area”; the “Special Milk area” comprises Bland Shire and the Riverina Division except Corowa and the Shires of Berri-gan, Coreen and Culcairn; and the “South-Western Slopes area” comprises the southern portion of the South-Western Slopes Division and the Riverina Division except the part in the “Special Milk area”.

TABLE 500.—Subsidy on Whole Milk Supplies—Country Districts (N.S.W.).  
Prices and Rates of Subsidy, 1944 to 1946.

Particulars.	North and South Coast Areas.	Southern Tablelands Area.	Tablelands Area.	Special Milk Area.	South-West Slopes Area.	Western Area.	
						3 Shires and 3 Towns( <i>n</i> )	Balance of Area.
Maximum Price—							
Pence per Gallon.							
Producer to Depot or Factory	12·5 ( <i>b</i> )	18·5	16·5	18·5	14·5	22·5	22·5
Producer to Vehicle Vendor	14 ( <i>b</i> )	20	18	20	16	24	24
Basic Seasonal Subsidy—							
Months	Apr.— Aug.—	Apr.— Sept.	Apr.— Sept.	Feb.— July.	Feb.— July.	Feb.— July.	Feb.— July.
Rate	2	4	4	4	2	4	4
Rates of subsidy (Seasonal, Drought and Special)—							
Pence per Gallon.							
1944—				( <i>e</i> )			
June–July	2	4	4	4	2	4	4
August	2	4	4	...	2	...	...
September	...	4	4	...	2	...	...
Nov. 20–Dec. 31	...	...	4, 6, 8( <i>d</i> )	6, 8	8 ( <i>e</i> )	6( <i>f</i> )	...
1945—							
January–March	...	4 ( <i>d</i> )	4, 6, 8 ( <i>d</i> )	6, 8	6, 8 ( <i>e</i> )	4, 6	...
April	2	4, 6, 8	4, 8	8	8 ( <i>e</i> )	8	4
May–August 15	4	6, 8	6, 8	8	8 ( <i>e</i> )	8	6 ( <i>g</i> )
August 16–31	4	6	6, 8	4	8 ( <i>e</i> )	4	2
September 1–15	1	5	5	3	1	3	1
September 16–30	1	5	5	1	1	1	1
October	1	1	1	1	1	1	1
1946—							
February–March	...	...	...	4	2	4	4
April–July	2	4	4	4	2	4	4
August	2	4	4	...	...	...	...
September	...	4	4	...	...	...	...

(a) Bogan, Lachlan and Marthaguy Shires, Condobollin, Nyugan and Warren Municipalities.

(b) Tamworth and Inverell, Depot 14·5d., vendor 16d. from June, 1944; Cobbora, Gilgandra, Talbragar and Timbregongie Shires and Dubbo and Wellington Municipalities, Depot, 18·5d., vendor, 20d. from 16th May, 1946.

(c) Tumut and Tumbarumba Shires: Nov. 20–March, Nil; April–July, 2d.; August, 2d.; Sept.–Oct., 1d. Gundagai Shire: Nov. 20–Dec., Nil; January–March, 4d.; thereafter as others. Holbrook Shire: Nov. 20–March, 6d.; thereafter as others.

(d) Specified Shires and Municipalities only.

(e) Includes Katoomba: 1944, June–July, 4d.; 1945, April, 4d.; May–August, 5d.; Sept.–Oct., 1d.

(f) Lachlan Shire and Condobolin (only).

(g) August 1–15, 2d.



## DAIRY INSTRUCTION AND RESEARCH.

Educational and experimental work relating to dairying is conducted by the Department of Agriculture at the State experiment farms, and at the Hawkesbury Agricultural College. Scientific investigation is undertaken at the Glenfield Veterinary Research Station, and the McMaster Animal Health Laboratory (at the University of Sydney) conducted by the Commonwealth Council for Scientific and Industrial Research is active in investigations associated with the welfare of the dairying industry.

The breeds of stud cattle kept at the various experiment farms are as follows:—At Cowra and Grafton, Australian Illawarra Shorthorns and Ayrshires; at Wollongbar, Guernseys; at Bathurst, Ayrshires and Guernseys; at Wagga Wagga and Glen Innes, Jerseys. At the Hawkesbury Agricultural College a Jersey stud holds a prominent place.

In order to enable factory managers and butter-makers to improve their scientific knowledge, dairy-science schools are held for short terms at different dairying centres, and certificates are given to those who pass examinations in the grading of cream and in the testing of milk and cream. The schools were attended by 37 students in 1944, 53 in 1945, and 59 in 1946.

## HERD RECORDING.

The practice of herd recording enables the farmers to ascertain the productivity of individual cows, to cull unprofitable animals, and to retain the progeny of those of higher grade.

A herd production improvement scheme is conducted by the State Department of Agriculture in two divisions, viz., (1) registered pure bred cows for which official production certificates are required; and (2) grade cows and registered pure bred cows for which a certificate is not sought. The aim is to ascertain the milk and butter-fat production of each cow in the herd. Records of the production of each cow during one day (24 hours) are made at intervals of approximately thirty days. The recording period is either 273 days in nine sub-periods of 30 days and one of 33 days or 365 days in eleven sub-periods of 30 days and one of 35 days. Milk and butter-fat yields during each sub-period are calculated by multiplying the yield on the day of record by the number of days in the sub-period, and the sum of the results for the sub-periods represents the official record for each cow.

Details of the yields of all cows are supplied to owners and in the case of recordings under Division (1) an official production certificate is issued for each cow which attains the required standard. For 273 days record, the standard ranges from 230 lb. to 350 lb. of butter-fat. The standard for mature cows is 350 lb. Cows at ages 2 to 4 years are classified as junior if the date of freshening occurs in the first six months, or as senior if in the second six months of the year of age, and the standards are as follows:—Age 2 years, junior, 230 lb.; senior, 250 lb.; 3 years, junior, 270 lb.; senior, 290 lb.; 4 years, junior, 310 lb.; and senior, 330 lb.

The fees for recording are—for pure-bred cattle, a herd entry fee of £2, together with a fee of 10s. per cow for each lactation period; for cows recorded under the second division of the scheme, a flat rate of 4d. per head for each month in which production is recorded.

From October, 1946, the scheme was extended to provide a calf marking service, a sire survey and a Register of Merit for cows recorded in either division of the recording scheme. The calf marking service fixes identity

of young stock by ear tattoo, and by hallmark in the case of a calf sired by a registered bull of a dam with a certificate of production. The sire survey enables farmers to estimate a sire's worth from figures supplied of dam-daughter production.

The register of merit contains an Intermediate Register and a Lifetime Register in which is an Elite Section. Cows qualify for entry in these, in order, by producing 1,100 lb., 2,240 lb., and 3,600 lb. of butter-fat in three, not more than eight and not more than ten lactation periods of 273 days, respectively. A Merit Certificate is issued for cows in both sections of the Life-time Register.

Approximately 100,000 cows were recorded in 1929-30. The practice was greatly curtailed for some years and a tendency to increase again was reversed during the war period. Relatively few cows were recorded between 1942-43 and 1944-45, but there was a marked increase in 1945-46. The number of cows recorded in each of the ten years ended September, 1946, was:—

TABLE 501.—Dairy Cows Recorded, 1936-37 to 1945-46.

Year ended September.	Pure-Bred Cows Recorded.		Grade Cows Recorded.	Total Cows Recorded.
	For Certified Recording.	For Uncertified Records.		
1937 ...	2,054	1,674	34,595	38,323
1938 ...	1,838	1,896	40,737	44,471
1939 ...	1,767	1,860	43,426	47,053
1940 ...	1,923	1,467	37,155	40,545
1941 ...	1,243	.....	22,496	23,739
1942 ...	1,040	.....	18,222	19,262
1943 ...	683	.....	1,215	1,898
1944 ...	769	.....	1,379	2,148
1945 ...	1,012	.....	4,110	5,122
1946 ...	1,748	.....	30,713	32,461

#### DAIRY CATTLE.

In the dairy herds the Shorthorn preponderates. This breed was introduced into the Illawarra or South Coast districts in the early period of dairying, before the Shorthorn had been developed by English breeders into a beef-producing type. By an admixture with other strains, a useful type of dairy cattle, known as the Illawarra, has been developed. There is also a large number of Jersey cattle, and the use of the breed for the production of butter is increasing. The Ayrshire is well represented in the dairy herds. It is noted for hardiness, but is better suited for producing milk for human consumption as fresh milk than for the purposes of butter-making.

The number of cows used for milking in the State in each year since 1932 is shown below:—

TABLE 502.—Milking Cows, 1932 to 1946.

As at 31st March.	In Registered Dairies.					Cows not in Registered Dairies being Milked.
	Being Milked.	Dry.	Heifers.		Total.	
			Springing.	Other over one Year.		
1932	No. 644,217	No. 229,623	No. 51,959	No. 129,930	No. 1,055,729	No. 95,148
1933	675,660	247,939	52,908	147,499	1,124,006	92,098
1934	705,398	239,508	55,789	155,105	1,155,800	97,147
1935	711,358	246,629	49,626	166,150	1,173,763	105,248
1936	696,502	243,731	43,720	173,631	1,157,584	107,609
1937	681,125	236,600	45,469	165,034	1,128,228	106,694
1938	660,167	245,345	44,273	145,130	1,094,915	97,547
1939	691,105	195,806	41,048	140,947	1,068,906	98,340
1940	659,404	223,638	46,721	139,236	1,068,999	97,237
1941	668,101	192,802	43,036	150,831	1,054,770	97,499
1942	651,186	199,157	46,163	158,666	1,055,172	94,569
1943	638,861	205,182	210,468		1,054,511	82,556
1944	609,867	227,268	206,138		1,043,273	123,083‡
1945	626,272	196,885	212,834		1,035,991	119,165‡
1946	594,809	192,083	50,949	183,246	1,021,087	118,335‡

† All milking cows, dry and in milk, not in registered dairies.

The number of cows in registered dairies in New South Wales reached the maximum, 1,173,763 in March, 1935, then declined in the next four years to 1,068,906 and a further decrease occurred in 1940-41. The number fell by 33,424 between March, 1943, and March, 1946, when it was 152,676 or 13 per cent. below the peak of 1935.

More than 90 per cent. of the cows in registered dairies were in the coastal districts, principally the North Coast and Hunter-Manning divisions, less than 4 per cent. in the Tableland divisions and 5 per cent. in the Western Slopes divisions. The number in the hinterland in March, 1946, was only 97,882, of which 38,123 were in the South-Western Slopes division. The principal dairying regions of the State are indicated in the diagrammatic map at page 9 of this volume.

Particulars of the number of cows in registered dairies in the various divisions in each year since 1935 are as follow:—

TABLE 503.—Cows in Registered Dairies in Divisions, 1935 to 1946.

At 31st March.	Division.								Total New South Wales.
	Coastal.					Table-lands.	Western Slopes.	Central Plains, Riverina and Western.	
	North Coast.	Hunter-Manning.	Metro-politan.	South Coast.	Total Coastal.				
1935 ...	534,893	276,348	35,485	150,681	997,407	64,479	91,301	20,576	1,173,763
1936 ...	535,105	272,647	36,729	151,972	996,453	57,684	84,629	18,818	1,157,584
1937 ...	523,607	268,656	36,096	152,050	980,409	52,929	79,142	15,748	1,128,228
1938 ...	518,617	268,283	34,337	149,330	970,567	47,066	65,413	11,869	1,094,915
1939 ...	516,880	268,047	32,243	144,632	961,802	42,099	54,539	10,466	1,068,906
1940 ...	525,062	261,093	32,684	139,469	958,308	41,306	57,008	12,377	1,068,999
1941 ...	515,379	258,609	30,282	136,356	940,626	39,171	60,979	13,994	1,054,770
1942 ...	516,566	259,518	29,833	136,658	942,575	39,374	60,504	12,719	1,055,172
1943 ...	510,740	261,421	30,617	132,841	941,619	41,506	57,701	13,685	1,054,511
1944 ...	512,773	258,167	31,953	131,524	934,417	39,982	57,344	11,530	1,043,273
1945 ...	508,534	257,857	30,461	133,154	930,006	37,749	56,263	11,973	1,035,991
1946 ...	510,586	256,910	27,804	127,905	923,205	36,797	50,548	10,537	1,021,087

The decline since 1935 has been general in all divisions. The decrease to 1946 was 74,202 or 7.4 per cent. in coastal areas, 27,682 or 42.9 per cent. on the tablelands, and 40,753 or 44.6 per cent. in the Western Slopes with 17,640 or 31.6 per cent. fewer in the South-Western Slopes Division.

## DAIRY FARMS.

Under the Dairies Supervision Act, every person who keeps cows to produce milk for sale for human consumption in any form must register his premises and conform to prescribed standards of cleanliness, etc. Some persons so registered, however, conduct operations on a very limited scale. The number of registered dairies decreased progressively from 20,123 in 1942-43, to 19,314 in 1944-45, and 18,196 in 1945-46.

The following statement of the number of holdings of one acre and upwards used for dairying operations on a commercial scale shows an increase from 18,838 in 1928-29 to 22,911 in 1933-34 and a subsequent decline to 18,104 in 1945-46.

TABLE 504.—Holdings used for Dairying, 1928-29 to 1945-46.

Year ended 31st March.	Holdings of one acre and upwards used principally for:—				
	Dairying.	Dairying and Agriculture.	Dairying and Grazing.	Dairying, Grazing and Agriculture.	Total used for Dairying.
1929† ...	12,985	2,942	1,722	1,189	18,838
1930† ...	13,294	3,170	1,607	1,034	19,105
1931† ...	14,484	3,371	1,148	1,146	20,149
1932 ...	15,136	3,406	1,480	1,614	21,636
1933 ...	15,177	4,101	1,475	2,102	22,855
1934 ...	15,033	4,315	1,498	2,065	22,911
1935 ...	14,929	4,226	1,474	1,952	22,581
1936 ...	14,969	4,066	1,445	1,834	22,314
1937 ...	14,521	4,178	1,394	1,716	21,809
1938 ...	14,136	4,072	1,316	1,592	21,116
1939 ...	14,129	3,660	1,331	1,489	20,609
1940 ...	14,210	3,752	1,309	1,433	20,704
1941 ...	14,098	3,675	1,252	1,461	20,486
1945 ...	12,473	3,821	1,639	1,239	19,172
1946 ...	12,157	3,578	1,341	1,028	18,104

† Year ended 30th June.

The figures quoted above indicate the principal purposes for which the holdings were used. A large proportion of the holdings engaged in dairying operations are single purpose farms.

## DAIRY FACTORIES.

Although there is some seasonal variation, approximately 75 per cent. of the milk production of the State is treated in factories either as cream or whole milk for the manufacture of butter, cream, cheese or preserved milk, the balance being sold for consumption as fresh milk or used on the farms. Most of the factories are situated in the country districts at convenient centres, and many are conducted on co-operative principles, with the dairy farmers as shareholders. Particulars of the operations of the dairy factories are shown in the chapter "Factories" of this Year Book.

## RAINFALL INDEX—DAIRYING DISTRICTS.

The following table provides a monthly index of rainfall in the coastal dairying districts of New South Wales. The index represents the ratio of actual to normal rainfall in each month, normal being the average over a long period of years and represented by 100 in all cases. The annual index is the mean of the monthly averages.

TABLE 505.—Index of Rainfall in Dairying Districts, 1935-36 to 1946-47.

Month.	Average Production of Butter in Factories.†	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
	mil. lb.												
July ...	5.0	93	43	87	98	46	18	40	86	6	148	139	2
August ...	5.3	44	42	130	147	102	90	38	31	156	234	47	16
September ...	7.0	196	77	21	53	77	50	30	23	128	65	50	88
October ...	10.1	102	55	173	102	208	85	53	332	147	34	89	86
November ...	12.1	45	23	275	78	87	82	88	153	209	56	115	73
December ...	12.3	93	179	110	18	49	167	30	140	176	50	82	72
January ...	12.9	88	99	172	91	58	144	26	75	178	70	77	140
February ...	12.1	79	139	133	13	47	102	180	60	37	99	140	204
March ...	12.2	128	199	84	248	104	87	108	44	50	41	160	101
April ...	10.3	58	63	105	107	88	88	45	43	28	142	152	131
May ...	7.9	94	11	205	53	39	63	32	216	59	90	18	79
June ...	5.8	48	187	50	32	58	68	73	25	57	373	44	29
Year ...	113.0	89	93	129	87	80	87	62	103	103	117	93	85

Average Production of Commercial Butter per Cow—lb.\*

Estimate for Season ...	156.7	147.8	164.0	153.8	174.0	162.2	144.8	167.2	156.8	132.9	148.6	139.9
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\* See Table 508. † Five years ended 1940.

The seasonal distribution of rainfall is an important factor in dairy production; protracted dry periods at any season have serious effects and good pasturage is particularly important in the spring and summer when production normally moves from low winter levels to a seasonal peak. Rainfall was much below normal in the spring and summer of each 1944-45 and 1945-46, and May to December, 1946, was one of the driest periods on record; hence the relatively low yields per cow in these seasons, and the further decline in production in 1946-47.

The index of rainfall in dairying districts is compiled for three sections of the coastal division; particulars for each month from July, 1944, are as follows; normal rainfall each month = 100:—

TABLE 506.—Index of Rainfall—Northern, Central and Southern Dairying Districts.

Month.	Northern.	Central.	Southern.	Northern.	Central.	Southern.	Northern.	Central.	Southern.
	1944.			1945.			1946.		
July ...	188	105	43	164	126	40	1	2	7
August ...	279	189	109	44	61	34	20	3	19
September ...	77	59	16	68	18	21	101	76	52
October ...	31	33	54	94	80	77	103	51	66
November ...	73	31	28	115	129	82	45	66	225
December ...	59	32	43	92	69	67	79	77	34
	1945.			1946.			1947.		
January ...	51	83	134	92	44	67	190	75	31
February ...	106	89	86	174	77	100	198	242	160
March ...	46	33	35	164	197	63	126	70	39
April ...	124	83	348	98	291	136	127	113	186
May ...	94	93	69	13	22	30	78	101	32
June ...	429	321	205	6	69	173	8	56	76
Year ...	130	96	98	94	99	74	90	78	77

DAIRY PRODUCTION.

The following statement shows the production of butter, cheese and bacon in each division of the State in the years 1943-44 to 1945-46, the annual figures for these three items being factory production during the year ended 30th June, plus farm production during the year ended three months earlier.

TABLE 507.—Butter, Cheese and Bacon Production, 1943-44 to 1945-46.

Division.	Butter Made.			Cheese Made.			Bacon and Ham Made.		
	194	1944-45.	1945-46.	1943-44.	1944-45.	1945-46.	1943-44.	1944-45.	1945-46.
Thousands.									
Coastal—	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
North Coast ...	53,852	48,306	49,606	1,895	1,749	2,032	4,504	5,608	5,937
Hunter and Manning ...	20,341	13,119	12,658	811	375	494	5,364	6,648	4,987
Metropolitan ...	256	188	298	65	1	2	19,124	29,268	24,269
South Coast ...	6,916	5,864	6,543	2,753	2,366	2,440	351	117	21
Total ...	81,365	67,477	69,105	5,524	4,491	4,968	29,343	41,636	35,214
Tableland—									
Northern ...	1,326	1,207	1,279	...	...	...	350	1,665	2,284
Central ...	1,169	1,014	1,013	...	...	...	78	50	23
Southern ...	368	331	293	...	...	...	14	14	7
Total ...	2,863	2,552	2,585	...	...	...	442	1,729	2,314
Western Slopes—									
North ...	1,298	1,185	1,151	...	...	...	27	27	7
Central ...	570	452	473	...	...	...	49	49	62
South ...	5,288	3,575	4,068	1	...	...	1,201	1,587	1,357
Total ...	7,156	5,212	5,692	1	...	...	1,277	1,663	1,426
Plains—									
North Central ...	114	115	128	...	...	...	12	12	4
Central ...	118	118	115	...	...	...	16	16	4
Riverina ...	711	739	629	...	1	...	73	74	34
Total ...	943	972	872	...	1	...	101	102	42
Western Division	30	9	26	...	...	...	1	1	...
Total ...	†92,357	†76,222	†78,280	5,525	4,492	4,968	†31,164	†45,131	†38,996

† Includes 649,189 lb. in 1943-44, 577,281 lb. in 1944-45, and 508,201 lb. in 1945-46 made from Queensland or Victorian cream.  
‡ Includes 827,110 lb. in 1943-44, 799,298 lb. in 1944-45, and 1,357,900 lb. in 1945-46 made from green bacon imported interstate.

This statement shows that dairying activities are conducted mainly in the coastal division and are relatively inextensive in the remainder of the State. In this area about 90 per cent. of the cows in registered dairies are depastured and 88 per cent. of the butter and practically the whole of the cheese are produced. About 60 per cent. of the butter of the State is made in the North Coast division. The Hunter and Manning division is next in importance, then the South Coast, and the South-Western Slopes. The manufacture of cheese is of relatively small extent and approximately one half of the total output is made in the South Coast division. The bacon factories are situated for the most part in the Coastal division.

A graph on page 565 illustrates the production of butter, cheese and bacon in each season since 1910.

### MILK.

Particulars of the consumption and supply of milk and milk products are published in the chapter "Food and Prices" of this Year Book.

Cows used for producing milk for sale are inspected by Government officers, who have power to condemn and prevent the use of diseased animals. The standard of milk sold for human consumption is prescribed, the quality of the milk sold is tested frequently, and prosecutions are instituted where deficiencies are found. By these means the purity and wholesomeness of dairy products are protected.

Under the Milk Act, 1931-1942, a Board regulates and controls the supply of milk and cream within the Sydney metropolitan and Newcastle districts. Its functions include the improvement of methods of collecting and distributing milk and the fixation of prices.

The total yield of milk is not accurately recorded, but is estimated approximately. Few dairy farmers actually measure the quantity of milk obtained from their cows throughout the year. The majority are concerned principally in producing cream for manufacture into butter. In recent years, however, it has been found possible to make checks against supplies to factories, and results show that the farmers' estimates are approximately correct. Moreover, herd recording has developed so far as to give a fair indication of the butter-fat content of the milk.

### *Average Yield per Cow.*

While sufficient information is not available to show conclusively the average annual production of milk per cow in New South Wales, an approximate estimate of the productivity per cow in registered dairies in terms of commercial butter is published in the next table. For the purposes of this estimate it is assumed that the mean of the number of cows in milk and dry at the beginning and end of any given year represents the average number kept for milking in registered dairies during that year, and an estimate is made (on the basis of butter fat content) of the quantity of commercial butter which may be produced from milk used for purposes other than butter-making.

The following table relates to all cows in registered dairies in New South Wales, and covers a period of years since 1927-28:—

TABLE 508.—Cows in Registered Dairies.—Average Yield.

Year.	Cows Dry and in Milk in Registered Dairies at end of Year.	Estimated Number of Cows Dry and in Milk in Registered Dairies during Year.	Butter Produced.		Estimated Commercial Butter Produccible from Milk of Cows in Registered Dairies used for other Purposes.	Total Commercial Butter Produced or Produccible from Milk of Cows in Registered Dairies.	Estimated Production of Commercial Butter per Cow.
			In Factories from Milk produced in New South Wales.	On Registered Dairy Farms.			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	
			Thousand lb.				lb.
1927-28...	756,687	753,322	96,246	1,276	24,945	122,467	162·6
1928-29...	776,322	766,504	91,424	1,091	24,328	116,843	152·4
1929-30...	777,815	777,069	100,603	1,025	23,783	125,411	161·4
1930-31...	813,831	795,823	109,133	1,113	23,777	134,023	168·4
1931-32...	873,840	843,836	119,372	1,437	22,930	143,739	170·3
1932-33...	923,599	898,720	126,266	1,624	24,240	152,130	169·3
1933-34...	944,906	934,252	141,762	1,606	26,329	169,697	181·6
1934-35...	957,987	951,446	145,843	1,635	26,740	174,218	183·1
1935-36...	940,233	949,110	119,195	1,683	27,878	148,756	156·7
1936-37...	917,725	928,979	107,142	1,433	28,733	137,308	147·8
1937-38...	905,512	911,618	118,111	1,171	30,236	149,518	164·0
1938-39...	886,911	896,212	105,537	1,054	31,251	137,842	153·8
1939-40...	883,042	884,977	121,658	935	31,446	154,039	174·0
1940-41...	860,903	871,973	106,065	881	34,530	141,476	162·2
1941-42...	850,343	855,623	86,170	757	36,935	123,862	144·8
1942-43...	844,043	847,193	101,438	830	39,374	141,642	167·2
1943-44...	837,135	840,589	91,665	795	39,371	131,831	156·8
1944-45...	823,157	830,146	70,670	959	38,723	110,352	132·9
1945-46...	786,892	805,024	75,459	863	43,304	119,626	148·6

The estimated number of cows dry and in milk in registered dairies during the year shown in the column B above represents the mean of the total numbers at the beginning and end of the year concerned as shown in column A. The estimated production per cow shown in column G is obtained by dividing the average number of cows (column B) into the commercial butter in respective years shown in column F. It represents, therefore, an average of all milking cows in registered dairies irrespective of periods of lactation, and includes heifers with first calf, aged cows, and cows disabled from any cause.

The averages shown in the table should be considered in conjunction with the index of rainfall in dairying districts published in Tables 505 and 506. The sharp decline in productivity per cow in 1935-36 and 1936-37 was occasioned by the very dry conditions in the former and an epidemic of ephemeral fever which occurred in the summer of the latter year. Conditions of drought prevailed in the dairying districts in 1941-42 and the average yield was far below normal. There was improvement in 1942-43, but in the following seasons there were periods of exceptionally low rainfall in dairying districts, and the average in 1944-45 was the lowest recorded since 1923-24.



## USES OF MILK.

The following statement shows the estimated amount of milk produced in New South Wales and used for various purposes in recent years:—

TABLE 509.—Uses of Milk, 1938-39 to 1945-46.

Purpose for which Milk was used.	Year ended 31st March.				
	1939.	1943.	1944.	1945.	1946.
	Gallons (000 omitted).				
<b>Butter making—</b>					
On farms ... ..	14,315	12,915	12,915	12,915	11,626
In N.S.W. factories ... ..	211,250	186,068	180,956	147,625	153,035
In other States ... ..	3,125	4,467	3,091	3,055	3,230
Total used for butter ... ..	228,690	203,450	196,962	163,595	167,891
<b>Cheese making—</b>					
On farms ... ..	302	119	151	94	112
In factories ... ..	7,413	5,234	5,388	4,467	5,122
Total used for Cheese ... ..	7,715	5,353	5,539	4,561	5,234
Sweet cream, ice cream, condensing, etc.	9,645	22,550	20,004	18,340	20,847
Pasteurised for metropolitan and Newcastle markets (a) ... ..	26,457	33,148	35,452	37,281	46,411
Balance sold as raw milk and used otherwise (b) ... ..	38,877	39,000	39,218	39,162	38,502
Total milk (produced in N.S.W.)	311,384	303,501	297,175	262,939	278,885

(a) Excludes and (b) includes approximately 11 million gallons of raw milk produced and sold for local consumption in the metropolis and Newcastle.

The milk used in 1945-46 for making butter represented 60.2 per cent. of the estimated total production; 1.9 per cent. was used for cheese; 7.5 per cent. for condensed milk, cream, ice-cream, etc.; and the balance—30.4 per cent.—was consumed as fresh milk or used otherwise. The quantity pasteurised for the Sydney and Newcastle markets was 34 per cent. greater in 1943-44 and 75 per cent. greater in 1945-46 than in 1938-39.

Further particulars regarding the consumption of fresh milk are shown in the chapter relating to "Food and Prices" of this Year Book.

## BUTTER.

The production and consumption of butter in New South Wales and the net export of butter from New South Wales in the six years ended 1939-40 were as follow; later details of the consumption and net export of butter are not available.

TABLE 510.—Butter Production, Consumption and Export (New South Wales).

Year ended 30th June.	Butter Produced.	Butter Consumed in N.S.W.	Net Export of Butter from N.S.W.	Year ended 30th June.	Butter Produced.	Butter Consumed in N.S.W.	Net Export of Butter from N.S.W.
		million lb.				million lb.	
1935	146.1	88.3	59.0	1938	120.9	93.7	25.6
1936	125.2	91.8	30.5	1939	118.8	93.0	20.6
1937	109.8	92.0	16.8	1940	116.8	95.0	*

\* Not available.

The following statement shows the annual production of butter in New South Wales since 1895. The figures include the butter made in factories from cream produced in other States; the quantity was 741,438 lb. in 1942-43, 649,183 lb. in 1943-44, 577,281 lb. in 1944-45, and 508,201 lb. in 1945-46.

TABLE 511.—Butter Production, 1895 to 1945-46.

Seasons. *	In Factories.	On Farms. †	Total.	Yearended 30th June.	In Factories.	On Farms. †	Total.
	Thousand lb. (Average per season)				Thousand lb.		
1895-99	22,930	5,689	28,619	1934	143,208	5,660	148,868
1900-04	36,313	4,248	40,561	1938	115,930	4,952	120,882
1905-09	54,752	4,502	59,254	1939	113,841	4,980	118,821
1910-15	75,239	4,431	79,670	1940	112,020	4,794	116,814
1916-20	65,591	4,131	69,722	1941	103,782	4,781	108,563
1921-25	85,073	4,639	89,712	1942	85,116	4,107	89,223
1926-30	96,536	4,740	101,276	1943	93,775	4,500	98,275
1931-35	126,946	5,445	132,391	1944	87,857	4,500	92,357
1936-40	112,978	5,325	118,303	1945	71,722	4,500	76,222
1941-45	88,450	4,478	92,928	1946	74,280	4,000	78,280

\* Calendar years until 1914-15. † Twelve months ended 31st March.

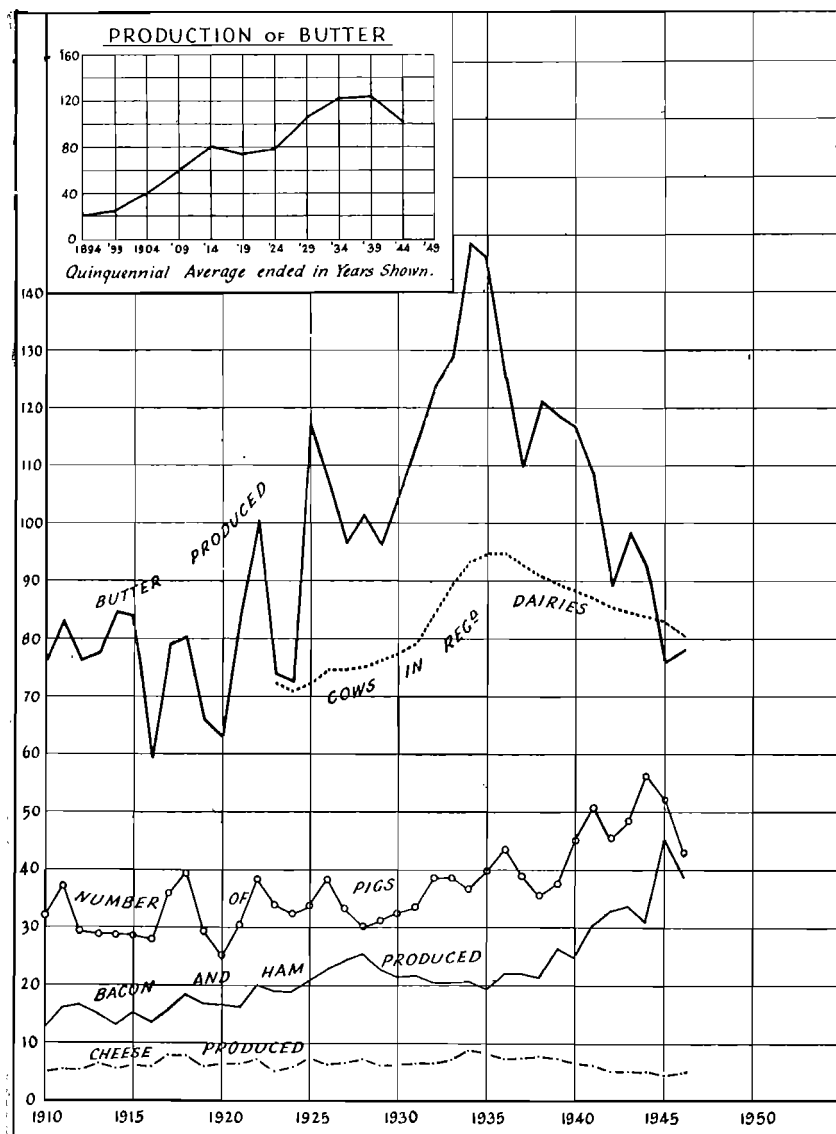
The highest level of production was reached in the bountiful seasons 1933-34 and 1934-35. This was due in part to a temporary expansion of dairying in the hinterland and to farmers' efforts to offset low prices by increasing production. In each year since 1937-38 the dairying districts have experienced periods of scanty rainfall (see Table 505), and production has been low. The output in 1945-46 was little greater than in 1944-45, when it was the smallest since 1923-24, and little more than half that of 1933-34.

#### *External Trade and Local Consumption of Butter.*

Particulars of the external trade in butter to and from New South Wales in the years 1934-35 to 1938-39 were published in the Year Book for 1939-40, at page 841. Later information regarding oversea exports is shown in Table 523, but details of interstate trade in butter are not available.

It is estimated that the average annual consumption per head of population in the five years ended June, 1940, was 34.4 lb. Particulars are shown in chapter "Food and Prices." Butter for civilians was rationed from 7th June, 1943, at 8 oz., and since 5th June, 1944, has continued at 6 oz. per person per week.

**DAIRY PRODUCTION IN NEW SOUTH WALES.  
1910 to 1945-46.**



The numbers at side of graph and inset represent 1,000,000 lb. of butter, cheese and bacon and ham, 10,000 cows (in milk and dry—estimated mean number over season) and 10,000 pigs at end of season.

*Production of Butter Monthly.*

The following table shows the quantity of butter produced in factories in New South Wales in each month of the season of greatest production (1933-34), in 1938-39 and since July, 1941.

TABLE 512.—Production of Butter Monthly, 1933-34 to 1946-47.  
(New South Wales.)

Month.	Quantity of Butter Produced in Factories.*							
	1933-34.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
	Thousand lb.							
July ...	5,929	4,437	4,592	5,163	3,313	2,462	3,286	2,641
August ...	6,306	4,887	4,638	5,346	3,279	3,065	4,008	2,758
September	8,102	6,915	5,850	5,952	4,933	5,397	5,007	3,254
October ...	13,046	10,842	7,504	7,499	8,626	8,488	7,557	4,446
November	15,607	12,589	7,935	11,275	11,553	8,169	7,387	5,070
December	17,606	11,423	8,608	12,032	13,079	7,532	8,820	6,372
January ...	18,293	9,707	6,664	13,044	12,821	8,004	8,146	6,386
February	14,950	10,826	8,311	10,219	10,184	6,769	8,146	7,384
March ...	15,480	12,137	10,116	8,648	8,440	8,261	8,498	8,051
April ...	12,064	11,880	8,642	6,129	5,165	5,811	6,185	5,741
May ...	9,135	10,456	6,789	4,789	3,870	4,477	4,468	4,458
June ...	6,690	7,742	5,467	3,679	2,594	3,287	2,772	3,824
Total	143,208	113,841	85,116	93,775	87,857	71,722	74,280	60,385

\* Compiled from monthly returns of the Division of Dairying, Department of Agriculture.

These monthly records show the seasonal nature of the production. It increases in a marked degree during the summer months, usually attaining a maximum between December and March and decreases during the winter, reaching a minimum usually in June or July. The figures for 1946-47 show the disastrous effects of extreme dryness in spring and summer months.

*Prices of Butter.*

Since May, 1934, the wholesale price of butter for local consumption has been fixed under the "equalisation" agreement referred to on an earlier page. The price so fixed was 140s. per cwt. in May, 1934, increased to 149s. 4d. on 29th June, 1937, and was 158s. 8d. on 8th June, 1938. The maximum wholesale price, Sydney, was fixed by the Prices Commissioner at 166s. 10d. on 6th March, 1942, and no change had been made up to October, 1947. In addition a box charge of 2s. 6d. per cwt. is customary.

The prices of butter sold to the United Kingdom Government since 1939-40 were fixed under contracts described on page 549; those for choicest, first and second grade butter were as follows:—

TABLE 513.—Prices of Butter, United Kingdom Contract, 1939-40 to 1946-47.

Period.	Choicest.		First Grade.		Second Grade.	
	Sterling.	Aust. Currency.	Sterling.	Aust. Currency.	Sterling.	Aust. Currency.
Per cwt., f.o.b., Australian port.						
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1939-40 to 1941-42 ...	109 9	137 2	108 6	135 7	104 11	131 2
1942-43 and 1943-44 ...	114 3	142 10	113 0	141 3	109 5	136 9
1944-45 and 1945-46 ...	147 9	184 8	146 6	183 1	142 11	178 7
1946-47 ...	173 6	216 10	172 3	215 3	168 6	210 7

*Prices Received by Dairy Farmers.*

Dairy farmers who supply cream to butter factories are paid according to its butter-fat content, and the return they receive—calculated as per lb. of butter—depends on the relative proportions of the factory output consumed in Australia and exported overseas, as well as the prices realised in home and overseas markets.

The average prices paid to dairy farmers for cream supplied to butter factories in New South Wales in recent years are shown below. The averages are stated as per pound of commercial butter, and those for the years 1942-43 to 1945-46 include Government subsidy as described on page 551.

TABLE 514.—Cream for Butter—Average Prices Paid to Dairy Farmers, Years ended June, 1924 to 1946.

Year.	Average Price to Suppliers.	Year.	Average Price to Suppliers.	Year.	Average Price to Suppliers.
	d.		d.		d.
1923-24 ...	16-6	1931-32 ...	11-2	1939-40 ...	13-6
1924-25 ...	13-0	1932-33 ...	9-4	1940-41 ...	13-6
1925-26 ...	15-8	1933-34 ...	8-4	1941-42 ...	13-6
1926-27 ...	16-2	1934-35 ...	9-4	1942-43 ...	16-0*
1927-28 ...	16-0	1935-36 ..	11-4	1943-44 ...	18-6*
1928-29 ...	17-1	1936-37 ..	12-2	1944-45 ...	19-3*
1929-30 ...	15-8	1937-38 ...	13-0	1945-46 ...	20-3*
1930-31 ..	12-6	1938-39 ...	13-0		

\* Including Government subsidy.

The foregoing averages are calculated from records of all factories in New South Wales. The average amount of Government subsidy on butter made in the factories (included above) was 1.24d. per lb. in the year ended 30th June, 1943, 4d. per lb. in 1943-44, 4.63d. in 1944-45, and 3.80d. in 1945-46.

Each month the dairy farmer is paid for his cream at a price estimated to be slightly less than the probable proceeds from sales of butter, and at the end of each half-year he receives such further sums in the form of

"deferred pay" as accrue when the actual proceeds of sales are known. The half-yearly adjustments on this account have varied from  $\frac{1}{2}$ d. to 1½d. per pound in recent years. A comparison of monthly prices paid to suppliers of cream to the principal North Coast factories is shown below; deferred pay and subsidy are included:—

TABLE 515.—Cream for Butter—Monthly Prices Paid to Dairy Farmers, (North Coast Factories, N.S.W.).

Month.	1938-39.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Pence per lb. of commercial butter (including deferred pay and subsidy).								
July ...	14·31	14	13·75	15·54	18·55	19·88	22·38	19·60
August ...	14·31	13·75	13·5	15·54	18·55	19·88	22·38	19·60
September	13·06	13·75	13·38	15·54	18·55	19·88	21·50	19·60
October ...	12·31	13·38	13·12	15·54	18·05	19·25	19·25	19·60
November	11·81	13·5	13·12	15·54	18·05	17·38	18·75	19·60
December	11·56	13·5	13	15·54	18·05	17·38	18·75	19·60
January ...	13·31	13·5	13·25	15·27	18·49	18·25	18·69	19·75
February	13·56	13·38	13·25	15·27	18·49	18·25	18·69	19·75
March ...	13·56	13·75	13·5	15·27	18·49	20·00	20·94	19·75
April ...	13·31	13·88	13·5	18·71	20·53	20·62	20·16	23·92
May ...	13·06	14	14	18·71	20·69	22·62	20·16	23·92
June ...	13·56	14·25	14·5	18·68	20·69	22·62	20·16	23·92
State Average for Year	13·03	13·61	13·57	15·99	18·59	19·34	20·27	20·32

### CHEESE.

Although favourable conditions exist in New South Wales for the production of cheese the industry has shown little or no expansion in the past thirty years. This is said to be due to the fact that production of cheese is relatively unprofitable as compared with other dairying pursuits. The annual production is not sufficient for local requirements and appreciable quantities are imported from other States. Approximately one-half to three-fifths of the cheese made in New South Wales is produced in the South Coast division. The graph published on page 565 illustrates the trend in production in recent years.

The following table shows the production of cheese in factories and on farms in New South Wales since 1910:—

TABLE 516.—Cheese—Production, New South Wales, 1910 to 1945-46.

Year ended 30th June.	In Factories	On Farms.†	Total.	Year ended 30th June.	In Factories.	On Farms.†	Total..
Thousand lb.				Thousand lb.			
Annual average.				Season.			
1910-15*	4,625	1,192	5,817	1939 ...	7,193	293	7,486
1916-20 ...	6,154	717	6,871	1940 ...	6,634	170	6,804
1921-25 ...	6,285	235	6,520	1941 ...	6,412	58	6,470
1926-30 ...	6,480	154	6,634	1942 ...	5,225	37	5,262
1931-35 ...	7,408	156	7,564	1943 ...	5,146	119	5,265
1936-40 ...	7,147	267	7,414	1944 ...	5,374	151	5,525
1941-45 ...	5,312	91	5,403	1945 ...	4,400	92	4,492
				1946 ...	4,858	110	4,968

\* Calendar years. † Years ended 31st March, 1932 and later years.

The average annual consumption of cheese in New South Wales prior to the war was approximately 11,000,000lb., or 4 lb. per head of population.

The equalisation scheme and Commonwealth subsidies for dairy products described in this chapter apply to cheese produced in factories in New South Wales.

Particulars regarding contracts for the purchase of Australian cheese by the United Kingdom Government are shown on page 549. The contract prices for choicest and first grade cheese per cwt. were as follow:—

Currency.	Sept., 1939, to June, 1941.	July, 1941, to June, 1942.	July, 1942, to June, 1944.	July, 1944, to June, 1946.	July, 1946, to June, 1947.
	s. d.	s. d.	s. d.	s. d.	s. d.
Sterling ... ..	61 3	67 0	70 0	86 0	101 0
Australian ... ..	76 7	83 9	87 6	107 6	126 3

#### CONDENSED AND POWDERED MILK.

In 1945-46 there were ten factories for the manufacture of condensed, concentrated and powdered milk in New South Wales. The quantities made in 1938-39 and in each of the past five years were as follows:—

TABLE 517.—Preserved Milk—Production (N.S.W.).

Product.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
	lb.	lb.	lb.	lb.	lb.	lb.
Concentrated milk	2,332,097	13,970,002	16,519,140	19,597,801	18,448,198	19,510,583
Condensed milk ...	3,815,546	12,097,687	6,418,654	7,547,365	6,514,023	5,874,337
Powdered milk ...	2,551,748	6,631,283	7,563,315	9,186,227	5,697,349	10,078,530

In making these and other milk products such as sterilised cream and malted milk, 16,971,539 gallons of milk were used in 1943-44, 15,279,691 gallons in 1944-45, and 17,129,555 gallons in 1945-46.

#### Pigs.

Pig breeding in New South Wales is carried on usually in association with dairy farming, but during the war it expanded considerably as a mixed farming activity and steps were taken to encourage increased production from the industry. Pig meats were included in war-time contracts with the United Kingdom Ministry of Food, and further particulars are given in the chapter "Pastoral Industry."

Pigs in the State at 31st March reached the record number of 561,294 in 1944, having increased by 183,950 compared with 1939. In 1946 the number, 432,612, was somewhat below the average in pre-war years (see Table 452).

The extent of pig-raising is illustrated by particulars of slaughtering in conjunction with the number at the end of each season. The number of pigs slaughtered in 1946, was 242,582 below the record number of 737,882 slaughtered in 1941-42, and was 11.7 per cent. below the annual average (560,889) in the five seasons ended March, 1939. Shortages of feeding grain and concentrates and adverse dairying seasons were factors in the decrease in more recent years.

A comparative statement of pigs at end of season and annual slaughterings is shown below:—

TABLE 518.—Pigs in New South Wales, 1901 to 1946.

Five Years ended—	Pigs at end of Period.	Pigs Slaughtered per annum.	Year ended 31st March.	Pigs at end of Year.	Pigs Slaughtered during Year.
1905 (Dec.) ...	310,702	231,374	1936 ... ..	436,944	595,624
1910 „ ...	321,632	244,618	1937 ... ..	390,780	613,957
1916 (June) ...	281,158	286,338	1938 ... ..	356,765	536,868
1921 „ ...	306,253	296,279	1939 ... ..	377,344	552,939
1926 „ ...	382,674	348,461	1940 ... ..	451,064	542,359
1931 „ ...	334,331	420,747	1941 ... ..	507,738	596,851
1936 (March) ...	436,944	488,016	1942 ... ..	454,102	*737,882
1941 „ ...	507,738	568,596	1943 ... ..	486,960	*668,930
			1944 ... ..	561,294	*503,039
			1945 ... ..	523,917	*554,679
			1946 ... ..	432,612	*495,297

\* Calendar year ended three months earlier.

Trends in the industry are revealed also by changes in the number of breeding stock from year to year. Particulars to show these have been collected in each year since 1942-43, and are as follow:—

At 31st March—	Boars.	Breeding Sows.	Other Pigs.	Total Pigs.
1943 ... ..	14,719	69,793	402,448	486,960
1944 ... ..	14,382	69,331	477,581	561,294
1945 ... ..	12,073	60,616	451,228	523,917
1946 ... ..	10,663	51,902	370,047	432,612

The following statement shows the number of pigs in divisions of the State in various years since 1921:—

TABLE 519.—Pigs in Divisions, 1921 to 1946.

Division.	1921 (June).	1931 (June).	1939 (March).	1944 (March).	1945 (March).	1946 (March).
North Coast ...	117,220	152,243	176,394	205,417	198,793	177,446
Hunter and Manning ...	49,424	64,287	81,860	73,367	57,840	42,699
Metropolitan ...	20,863	16,924	18,627	27,671	30,013	26,642
South Coast ...	21,396	26,958	31,279	28,078	26,262	23,544
Total, Coastal	208,903	260,412	308,160	334,533	312,908	270,331
Tablelands ...	29,700	20,553	21,842	39,614	36,844	32,949
Western Slopes ...	39,599	35,503	31,218	127,546	117,678	88,055
Other .....	28,051	17,863	16,124	59,601	56,487	41,277
Total, New South Wales	306,253	334,331	377,344	561,294	523,917	432,612

At 31st March, 1946, the pigs in the North Coast division represented 41 per cent. of the total, and 20 per cent. were in the Western Slopes divisions, where there had been marked expansion in recent years.



*Prices of Pigs.*

The average prices of certain representative classes of pigs in the metropolitan saleyards at Flemington in 1939, and each of the past three years are shown below. The averages were compiled from reports of the State Marketing Bureau.

TABLE 520.—Average Prices of Pigs, Sydney 1939 to 1946.

Month.	Heavy and Medium Weights.							
	Baconers.				Porkers.			
	1939.	1944.	1945.	1946.	1939.	1944.	1945.	1946.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	73 1	112 0	105 9	115 1	46 1	55 6	66 9	78 0
February ...	72 8	109 6	105 11	117 5	47 2	60 6	70 0	78 3
March ...	73 5	110 9	104 0	113 2	47 5	60 0	66 6	75 10
April ...	73 1	109 9	103 5	109 0	48 2	57 3	64 2	67 8
May ...	71 8	112 0	101 9	100 10	45 6	62 3	60 8	60 8
June ...	73 0	108 3	104 3	101 10	46 1	60 0	61 7	61 8
July ...	74 7	107 9	105 11	106 10	47 5	60 0	65 6	62 6
August ...	77 0	107 3	107 8	109 9	49 9	58 6	67 7	73 8
September ...	81 0	106 3	107 9	120 8	49 9	64 3	68 8	81 3
October ...	83 1	104 9	105 1	126 2	52 2	61 6	69 11	82 2
November ...	84 0	103 6	105 9	132 9	51 6	59 0	72 8	84 7
December ...	81 10	102 3	108 9	131 10	50 10	61 3	72 9	84 2
Average	76 6	107 10	105 6	115 5	48 6	60 0	67 3	74 2

Prices of both baconer and porker pigs were more than 50 per cent. higher in 1946 than in 1939.

*Bacon and Hams.*

The output of bacon and hams from factories and farms in New South Wales since 1910 is shown hereunder:—

TABLE 521.—Bacon and Ham Production, 1910 to 1945-46.

Year ended 30th June.	Production of Bacon and Ham.			Year ended 30th June.	Production of Bacon and Ham.		
	Factory.†	Farm.‡	Total Production.		Factory.†	Farm.‡	Total Production.
	Annual Average.				Season.		
	lb. 000.	lb. 000.	lb. 000.		lb. 000.	lb. 000.	lb. 000.
1910-15*	12,757	2,397	15,154	1939	21,722	431	22,153
1916-20	13,935	2,343	16,278	1940	20,519	417	20,936
1921-25	17,627	1,584	19,211	1941	25,522	492	26,014
1926-30	22,535	1,014	23,549	1942	28,319	504	28,823
1931-35	19,670	1,051	20,721	1943	29,430	485	29,915
1936-40	20,880	629	21,509	1944	29,853	485	30,338
1941-45	31,394	490	31,884	1945	43,848	484	44,332
				1946	37,494	144	37,638

\* Calendar years to 1913. ‡ Twelve months ended 31st March, 1932 and later years.

† Exclusive of bacon cured from green bacon imported interstate (see note to Table 507).

The production of bacon and ham increased slowly between 1910 and 1930, then fluctuated at a slightly lower level until 1939-40. It increased appreciably in 1940-41, gradually in the next three years, and sharply in 1944-45. Although production in 1945-46 was 6,354,000 lb. or 15 per cent. less than the record of 44,332,000 lb. in 1944-45, it remained about 75 per cent. above the average in 1936-40.

### *Frozen Pork.*

Before the war (1939-45) relatively little frozen pork was exported from New South Wales, but in 1943-44 the quantity and value reached 3,329,000 lb. and £125,772, respectively. The following statement gives particulars of frozen pork exported overseas in 1928-29, 1938-39 and each of the last five years.

TABLE 522.—Frozen Pork Exported Overseas, 1928-29 to 1945-46.

Particulars.	1928-29.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Quantity ... 000 lb.	107	1,009	1,539	769	3,329	2,847	448
Value... ... £A.	4,595	29,993	55,340	39,130	125,772	114,564	21,267

### *Lard.*

Statistics showing the total production of lard are not available. The quantity extracted in factories, and the value at the factory in recent years (ended June) were as follows:—

	1942-43.	1943-44.	1944-45.	1945-46.
Quantity ... ... lb.	719,658	961,967	2,201,494	1,175,584
Value ... ... £	17,154	26,502	64,257	31,095

These quantities represent only a portion of the total output on farms, and exclude lard produced in many other establishments.

### EXPORTS OF DAIRY PRODUCTS.

The following table shows the overseas exports of the principal dairy products from New South Wales, inclusive of ships' stores, at intervals since 1911. New South Wales produce exported through other States is excluded from account. In recent years a substantial quantity of butter from New South Wales has been shipped abroad from Brisbane, Queensland.

TABLE 523.—Oversea Exports of Butter, Cheese, Milk and Bacon (from N.S.W.) 1911 to 1945-46.

Year ended 30th June.	Oversea Exports (including Ships' Stores).							
	Butter.		Cheese.		Milk—Preserved, Condensed, etc.		Bacon and Ham.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lb. (000)	£	lb. (000)	£	lb. (000)	£	lb. (000)	£
1911*	33,044	1,518,993	141	3,723	1,127	17,471	618	17,561
1921	28,429	3,468,280	807	49,813	11,576	691,122	1,357	132,075
1931	31,793	1,698,835	189	8,969	497	18,006	552	28,646
1935	58,028	2,182,429	2,136	55,413	2,569	196,668	591	33,825
1936	33,278	1,675,728	540	18,228	2,592	194,207	631	36,286
1937	20,787	1,033,192	424	15,724	2,342	154,923	740	41,182
1938	31,758	1,919,132	1,081	46,263	3,210	207,516	659	42,250
1939	24,391	1,382,876	294	12,121	2,979	247,806	464	28,268
1940	32,554	2,021,335	350	35,214	6,754	309,134	1,742	112,085
1941	20,049	1,271,307	4,219	185,102	9,466	306,279	2,614	178,597
1942	10,035	678,806	2,399	131,266	9,613	243,639	3,070	219,293
1943	16,246	1,118,480	5,408	340,497	8,625	336,908	1,690	140,440
1944	10,143	674,612	10,274	661,863	11,361	484,753	6,065	495,418
1945	7,092	636,773	10,840	656,720	13,666	629,914	4,980	445,213
1946	13,594	1,261,587	5,665	293,245	17,156	725,017	7,348	699,866

\* Calendar year.

The quantity and value of eggs and poultry exported overseas are given in Table 530. Exports of frozen pork are shown in Table 522.

## POULTRY-FARMING.

In recent years poultry farming has grown in importance as a distinct industry in New South Wales and it is conducted also in conjunction with dairying and other rural pursuits. The estimated farm value of eggs and poultry produced in New South Wales, as far as ascertainable, was approximately £9,108,000 in 1945-46.

Statistics of poultry production are collected under the Census Act from occupiers of rural holdings of one acre or more and, as far as practicable, information is obtained also regarding poultry on smaller holdings. Owing to the relatively small area of land required for poultry farming, it is difficult to make a complete annual survey of the industry, but special efforts were made in 1934-35 and 1944-45 to remedy the deficiency in the collection of data.

The resultant figures shown below together with those of 1939-40 and 1945-46 are believed to reflect fairly the development of the industry during the period covered:—

TABLE 524.—Poultry in New South Wales, 1935 to 1946.

As at 31st March.		Fowls, Chickens, etc.	Ducks, etc.	Geese, etc.	Turkeys, etc.	Year ended 31st March.	
						Eggs Produced.*	Farm Value of Production. †
						million doz.	£million.
1935	...	5,521,000	219,000	31,000	244,000	51.2	2.8
1940	...	5,474,000	202,000	23,000	213,000	56.2	3.5
1945	...	9,809,000	256,000	21,000	247,000	89.1	8.7
1946	...	8,643,000	208,000	20,000	208,000	91.2	9.1

\* 71759—7

\* Estimated.

† Eggs and Table Poultry.

A period of relative stability was followed by rapid expansion of poultry farming during the war years, encouraged by higher prices and measures taken to meet war-time demands. The number of young stock raised in 1944-45 was easily a record, but the shortage of feeding stuffs caused an appreciable decrease in the number of poultry in 1945-46.

The numbers shown in the foregoing table relate to poultry on rural holdings one acre or more in extent and estimates made by local collectors in other areas. In 1946, there were approximately 6,055,000 fowls, chickens, etc., on 6,337 holdings with 150 or more hens and pullets; approximately 420,000 fowls, chickens, etc., on 4,363 holdings with 40 and less than 150 hens and pullets, and approximately 2,168,000 on other holdings.

The following table shows the development of poultry farming in respect of holdings with 150 or more hens and pullets:—

TABLE 525.—Commercial Poultry Farms, 1935 to 1946.  
(With 150 or more laying stock.)

Year ended 31st March.	Number of Farms.	Total Fowls and Chickens.	Chickens Hatched.	Chickens Sold.
1935 ... ..	3,474	2,321,000	3,958,000	1,278,000†
1940 ... ..	3,072	2,647,000	5,940,000*	3,119,000*†
1945 ... ..	7,108	6,897,000	12,339,000*	9,109,000*‡
1946 ... ..	6,337	6,055,000	10,947,000*	6,135,000*‡

\* Including hatcheries.

† Day old.

‡ Under 1 month old.

The 6,055,000 stock as at 31st March, 1946, included 2,899,000 pullets hatched in 1945 and 2,633,000 hens hatched in 1944 or earlier years. In addition there were 184,000 cocks and cockerels and 339,000 chickens under three months old.

In 1945 when it seemed probable that scarcity of wheat and other poultry food would lead to heavy culling of stock, the Commonwealth Government arranged a contract with the United Kingdom Ministry of Food for the purchase of "boiler" type poultry. The contract price f.o.b. Australian ports was 1s. 3d. sterling (1s. 6½d. Australian) per lb. (undrawn).

In 1946 a contract was made covering only first quality poultry packed at premises approved by the Commonwealth Department of Commerce and Agriculture. Contract prices in sterling (Australian currency equivalent in parenthesis) per lb., frozen weight, undrawn, f.o.b. Australian ports, were:—fowls, 1s. 5d. (1s. 9½d.); chickens, 2s. 2d. (2s. 8½d.); turkeys 2s. 4d. (2s. 11d.) and ducks, 1s. 5d. (1s. 9½d.).

Special attention is devoted to improving the laying qualities of the different breeds, and egg-laying competitions, organised originally by private subscriptions, have been conducted since 1901 at the Hawkesbury Agricultural College. The most successful laying breeds have proved to be the Australorp, the White Leghorn, the Rhode Island Red, and the Langshan. In the Australorp, produced in Australia, Black Orpington blood predominates. A Government Poultry Expert and staff carry out experimental work and assist poultry farmers in selecting breeding stock, culling the hens, and in dealing with general problems associated with the industry.

Calculations covering the maintenance of fowls competing in the Hawkesbury Agricultural College laying tests in recent years show that feeding costs (with food purchased at wholesale rates and freight and cartage added) amounted to 7s. 7d. per bird per year in 1944-45 and 7s. 9d. in 1945-46. As the feeding costs in this competition are based upon Sydney market prices plus freight and cartage, they are indicative of the average costs of feeding on commercial poultry farms. In successive years ending in March the feeding costs per hen per annum were as follow:—

TABLE 526.—Cost of Feeding Fowls, 1929-30 to 1945-46.

Year ended March.	Cost of feeding per hen.	Year ended March.	Cost of feeding per hen.	Year ended March.	Cost of feeding per hen.
	s. d.		s. d.		s. d.
1930 ... ..	9 10	1936 ... ..	7 2	1942 ... ..	8 0
1931 ... ..	7 3	1937 ... ..	8 8	1943 ... ..	7 11
1932 ... ..	5 9	1938 ... ..	9 6	1944 ... ..	8 3
1933 ... ..	7 0	1939 ... ..	7 0	1945 ... ..	7 7
1934 ... ..	6 3	1940 ... ..	6 3	1946 ... ..	7 9
1935 ... ..	5 9	1941 ... ..	7 3		

The course of prices of wheat, maize, bran and pollard is indicated in Table 386. The prices of wheat for stock feeding from January, 1940, to December, 1946, are given on page 454.

#### *Prices of Eggs.*

The average monthly wholesale prices of new-laid hen eggs per dozen in Sydney since January, 1939, are shown in the following table, together with the average price in each year weighted in accordance with the seasonal expectation of laying:—

TABLE 527.—Wholesale Prices of Eggs, 1939 to 1946.

Month.	Weight	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.
		d.	d.	d.	d.	d.	d.	d.	d.
January ... ..	13	18.3	15.2	15.8	14.0	22.4	24.0	24.0	21.0
February ... ..	11	22.5	18.1	18.0	16.2	24.0	24.0	24.0	23.9
March ... ..	7	17.3	19.1	18.4	18.9	24.0	24.0	24.0	24.0
April ... ..	6	20.1	21.6	21.0	24.0	24.0	24.0	24.0	24.0
May ... ..	4	21.0	23.8	21.0	24.0	24.0	24.0	24.0	24.0
June ... ..	6	20.3	21.0	17.9	24.0	24.0	24.0	24.0	24.0
July ... ..	10	15.0	16.3	15.2	24.0	24.0	24.0	24.0	24.0
August ... ..	16	12.7	14.3	14.0	18.7	22.9	23.5	22.0	21.0
September ... ..	19	12.0	14.0	14.0	18.0	19.0	19.1	19.0	19.0
October ... ..	19	12.0	14.0	13.8	18.0	19.0	19.0	19.0	19.0
November ... ..	17	12.0	14.7	13.0	18.0	19.0	19.4	19.0	19.0
December ... ..	16	14.0	15.0	13.5	20.0	20.2	20.8	20.0	19.0
(Estimated weighted average price for year).	144	15.1	15.9	15.2	18.9	21.4	21.7	21.4	20.9

The monthly averages are unweighted and represent the mean of the daily quotations. Prices are quoted also for medium and pullet eggs, but these are not included **above**.

The average wholesale price of eggs was 3½d. per dozen higher in 1942 than in 1941 and about 2½d. to 2¾d. higher in 1943, 1944 and 1945 than in 1942, the seasonal increase having been effected in those years three months earlier than formerly. The average price in 1946 was about 5½d. per dozen or 38.4 per cent. higher than in 1939 but ½d. per dozen less than in 1945.

### *Egg Marketing Board.*

The Egg Marketing Board was constituted in 1928 in terms of the Marketing of Primary Products Act and has authority over the marketing of all eggs produced in New South Wales except in remote areas where production is negligible. As re-constituted in November, 1946, the Board is comprised of five representatives of producers and two Government nominees. Further details regarding the Board and its functions and the area of its jurisdiction are given in the 1941-42 and 1942-43 edition of the Year Book on page 792.

In July, 1943, the Commonwealth Controller of Egg Supplies assumed control of production and distribution of eggs in terms of National Security (Egg Industry) Regulations, which remained in operation until 31st December, 1947, under the Defence (Transitional Provisions) Act, 1946. Persons having forty (twenty to 31st October, 1943) or more female fowls or ducks of productive age are required to consign the eggs to the Egg Marketing Board as agent for the Controller unless permitted by the Controller, under contract, to sell their eggs privately as exempt producers.

A summary relating to the operations of the Egg Marketing Board is shown below:—

TABLE 528.—Egg Marketing Board, 1934-35 to 1945-46.

Pool Year.	Eggs under Board's Administration.*			Realisations by Board.*				
	Sold by exempt Producers.	Handled by Board.	Total.	Local Sales.**		Exports.		
				Quantity.	Average per dozen.	Quantity.	Average per dozen. net. †	Cost of Export per dozen. †
	Thousand dozens.			doz.	d.	doz.	d.	d.
1934-35 ...	5,311	14,744	20,055	7,862,317	12-75	6,881,820	11-15	4-95
1935-36 ...	6,250	14,506	20,756	9,734,977	13-72	4,770,690	13-32	4-83
1936-37 ...	5,893	15,148	21,041	10,048,240	15-22	5,100,000	12-21	4-54
1937-38 ...	6,359	13,983	20,342	9,750,334	16-73	4,232,880	14-72	4-71
1938-39 ...	6,973	13,453	20,426	10,161,377	15-51	3,292,050	12-41	4-99
1939-40 ...	8,724	14,728	23,452	10,992,101	14-21	3,735,600	12-51	1-83
1940-41 ...	9,729	19,331	29,060	11,170,174	15-19	7,907,310	13-74	1-98
1941-42 ...	11,653	26,882	38,535	16,161,288	14-37	10,720,560	13-10	0-58
1942-43 ...	15,670	26,976	42,646	24,126,634	19-61	2,850,000	15-58	0-85
1943-44 ...	14,837	27,213	42,050	16,353,412	21-81	...	...	...
1944-45 ...	12,769	34,600	47,369	20,590,559	21-84	§	§	§
1945-46 ...	12,215	37,666	49,881	19,679,003	21-30	§	§	§

\* As Agent for Controller of Egg Supplies since July, 1943.

† Sydney basis—including exchange premium.

‡ Up to and including 1938-39 costs embraced cases, packing materials, storage, cartage, wharfage freight and marine insurance. In 1939-40 and later years, costs and freight and marine insurance were excluded under the United Kingdom contract, were on f.o.b. basis.

§ Not available, on comparable basis.

|| Also pulp 253,000 doz.

\*\* From 1943-44,

as stated by Controller of Egg Supplies.

No eggs were exported by direction of the Controller in 1943-44; 51,000 dozen at 1s. 11d. per dozen were sent to Ceylon in 1944-45 and 3,326,580 dozen eggs in shell were shipped to the United Kingdom in 1945-46 at the net average price of 16.8d. per dozen (costs of export, 3.08d. per dozen), f.o.b. basis.

The quantity of eggs under the Board's administration was 42,646,000 dozen in 1942-43—the first full year of its present jurisdiction. The number rose to 47,369,000 dozen in 1944-45 and to 49,881,000 dozen in 1945-46, notwithstanding the exemption of flocks with 20 to 40 fowls or ducks. Particulars regarding realisations in respect of exports in the last three years are not available for comparison with former records.

Particulars regarding payments to producers (subject to pool deduction) in respect of eggs handled by the Board in each year since 1933-34 are shown below:—

TABLE 529.—Payments to Producers by Egg Marketing Board of New South Wales.

Pool Year.	Paid to Producers.		Pool Year.	Paid to Producers.	
	Amount.	Average per dozen.		Amount.	Average per dozen.
	£	d.		£	d.
1933-34	549,095	12·65	1940-41	1,219,000	15·13
1934-35	787,336	12·75	1941-42	1,593,000	14·22
1935-36	831,314	13·75	1942-43	2,193,000	19·51
1936-37	961,457	12·53	1943-44	2,353,209	20·76
1937-38	940,348	16·14	1944-45	2,992,438	20·69
1938-39	873,000	15·57	1945-46	3,158,517	20·06
1939-40	844,000	13·75			

Consignors to the Egg Marketing Board and producer agents contributed to the pool at the rate of 1d. per dozen from 1st July, 1939, to 14th December, 1941. Subsequent changes were 2d. per dozen from 15th December, 1941; 1d. from 1st June, 1942; 1½d. from October, 1942; 3d. from 3rd May, 1943; and 1½d. from 5th July, 1943. The rate was further reduced to 1d. per dozen as from 4th October, 1943. As agent for the Controller of Egg Supplies the Board is allowed handling and selling charges of 1d. and ¾d. per dozen, respectively.

#### *Export of Eggs and Poultry.*

In terms of the National Security Regulations, dated April, 1943, shipment of eggs is supervised by the Controller of Egg Supplies and exporters, as well as producers, must be licensed.

Large quantities of Australian eggs in shell were bought under contract by the United Kingdom Ministry of Food in 1939-40 and 1940-41. Early in 1941 it became impracticable to provide refrigerated shipping space and eggs were shipped as whole egg powder as described on page 854 of the 1940-41 issue of the Year Book.

The Ministry contracted to take the entire exportable surplus of 1945-46 and up to 30,000,000 dozen eggs in 1946-47 either in shell or as powdered eggs. Under an agreement covering the three years ending June, 1950, the United Kingdom will take each year up to 30,000,000 dozen eggs in shell, 30,240,000 lb. of frozen whole egg, 6,048,000 lb. of sugared egg

powder, 1,008,000 lb. of whole egg powder and 112,000 lb. of frozen albumen. Prices, f.o.b., Australian ports in Australian currency fixed for the seasons 1947-48 and 1948-49 are 2s. 1d. per dozen in shell, and per lb., 1s. 6½d. for pulp, 4s. 11½d. for sugared powder, 6s. 6½d. for whole powder, and 1s. 9½d. for albumen. Packing of eggs in shell is to cease on 24th December, but pulp and powder may be packed at any time. All eggs possible are to be shipped in shell; eggs are to be powdered only if unsuitable for shipment in shell and when supplies exceed Australian freezing and cold storage capacity for egg pulp.

### *Exports of Eggs and Poultry.*

The following table shows particulars of the oversea export trade in eggs and poultry:—

TABLE 530.—Oversea Exports of Eggs and Poultry from New South Wales, 1935-36 to 1945-46.

Year ended 30th June	Eggs.			Frozen Poultry.		Total Value.
	In Shell.	Other.	Value.	Quantity.	Value.	
	doz.	lb.	£	pairs.	£	£
1936	5,137,424	.....	263,595	25,763	21,447	285,042
1937	5,429,732	.....	322,082	25,433	23,598	345,680
1938	4,381,506	800	268,350	27,377	28,995	297,345
1939	3,427,702	686	205,801	19,294	18,295	224,096
1940	3,789,747	.....	195,458	49,019	37,563	233,021
1941	8,255,527	293,608	524,091	42,672	26,531	550,622
1942	175,540	3,534,303	553,367	19,049	14,209	567,576
1943	358,670	2,303,498	291,072	8,072	4,164	295,236
1944	278,455	1,662,866	162,326	36,496	30,265	192,591
1945	281,700	669,654	198,781	42,773	42,787	241,568
1946	3,736,965	5,190,795	802,663	136,350	130,344	933,007

The supply of eggs available for export oversea declined after 1941-42 owing to increased requirements for Australian and Allied Forces based in Australia. No shipments were made to the United Kingdom in 1943-44 and 1944-45, but shipments in shell and as egg pulp and egg powder were resumed in 1945-46 following a decline in Service requirements and the value of exports far surpassed all previous records.

### BEE-KEEPING.

The bee-keeping industry is inextensive, and is conducted generally as an adjunct to other rural occupations. There is, however, a number of commercial apiaries, and migratory bee-keeping has tended to increase. Good table honey is obtained from the flora of native eucalypts of many varieties.

The industry is subject to regulation in terms of the Apiaries Act in order to prevent the spread of disease amongst bees. Frame hives must be used and box hives are prohibited.

In terms of an amending Act, which was brought into operation in February, 1945, bee-keepers are required to register annually each apiary in which bees are kept. Where a bee-farmer with at least fifty hives of bees in a registered apiary has carried out work to improve it as a site for bee-farming, the apiary may be registered as a protected apiary. No



person may establish an apiary within a prescribed distance of a protected apiary without Ministerial consent. The prescribed distance may not exceed two miles.

Statistics collected under the Census Act up to 1944-45, which are published below represent, in the main, the extent of bee-keeping on holdings of one acre and upwards, but hives are maintained on smaller areas, and information regarding many of these is not available. No Census Act collection was made in 1945-46, but the results of a return obtained from all registered beekeepers by the Department of Agriculture have been inserted for that year. The records, therefore, are not fully comparable from year to year.

The particulars recorded in recent years are shown below:—

TABLE 531.—Bee Hives and Honey Production, 1935-36 to 1945-46.

Season.	Bee Hives.			Honey.	Average Yield of Honey per Productive Hive.	Beeswax.
	Productive.	Un-productive.	Total.			
	No.	No.	No.	lb.	lb.	lb.
1935-36	76,481	19,875	96,356	4,577,097	59.8	62,886
1936-37	67,807	25,277	93,084	2,935,282	43.3	52,461
1937-38	74,301	20,345	94,646	3,356,609	45.2	49,945
1938-39	60,346	25,895	86,241	2,723,719	45.1	43,780
1939-40	59,670	22,779	82,449	2,477,381	41.5	42,393
1940-41	69,898	16,738	86,636	4,771,422	68.3	68,670
1941-42	*	*	*	†7,465,926	*	†124,432
1942-43	*	*	*	†1,744,560	*	†29,076
1943-44	66,200	14,214	80,414	†7,733,102	116.8	†105,688
1944-45	*	*	*	†8,534,640	*	†142,244
1945-46†	76,340	42,142	118,482	3,915,519	51.3	57,490

\* Not collected. † Estimated from receipts; includes production on holdings less than an acre in extent. ‡ From returns from all registered apairists to Department of Agriculture.

The yield per productive hive is subject to marked fluctuations according to seasonal conditions. The flow of honey was relatively poor in each year 1936-37 to 1939-40, in 1942-43, and in 1945-46. The production as recorded in 1944-45 was greater than in any earlier year.

The estimated value of the production from bees was £196,000 in 1943-44, £228,000 in 1944-45, and £119,000 in 1945-46. The quantity of honey and beeswax produced in each division in 1940-41 and 1943-44 (the only recent years for which particulars are available) was as follows:—

TABLE 532.—Honey and Beeswax produced 1940-41 and 1943-44.

Division.	1940-41.		1943-44.	
	Honey.	Beeswax.	Honey.	Beeswax.
	lb.	lb.	lb.	lb.
Coastal ... ..	1,225,633	23,720	1,846,266	25,191
Tableland ... ..	1,372,420	18,204	3,632,116	48,892
Western Slopes ... ..	1,814,053	23,986	2,099,982	29,373
Central Plains, Riverina, and Western Division ... ..	359,316	2,760	154,738	2,232
Total ... ..	4,771,422	68,670	7,733,102	105,688

## VALUE OF DAIRY AND FARMYARD PRODUCTION.

The farm value of production in the dairying and farmyard industries in 1945-46 amounted to £27,308,000. Dairying, apart from pigs, yielded £15,660,000; pigs, £2,421,000; poultry, £9,108,000; and bees, £119,000. The farm value of production since 1911 was as follows:—

TABLE 533.—Value of Dairy and Farmyard Production, 1928-29 to 1945-46.

Year.	Milk for Butter.	Milk for Cheese.	Milk (not used for Butter or Cheese).	Stock Slaughtered.		Total Dairying.	Poultry and Eggs.	Bees.	Grand Total.
				Milch Cows, etc.	Pigs.				
	Thousands.								
	£	£	£	£	£	£	£	£	£
1928-29	6,822	228	2,658	571	1,237	11,516	2,999	44	14,559
1929-30	6,884	234	2,608	524	1,105	11,355	3,140	44	14,539
1930-31	5,974	176	1,964	456	839	9,409	2,584	46	12,039
1931-32	5,821	182	1,887	276	730	8,896	2,595	34	11,525
1932-33	5,098	190	2,138	514	747	8,687	2,728	47	11,462
1933-34	5,221	199	2,206	641	821	9,088	2,603	22	11,713
1934-35	5,800	179	2,304	771	913	9,967	2,823	95	12,885
1935-36	5,846	188	2,521	973	1,077	10,605	3,439	68	14,112
1936-37	5,629	217	2,740	1,017	1,242	10,845	3,704	43	14,592
1937-38	6,582	240	2,876	1,169	1,299	12,166	3,896	51	16,113
1938-39	6,489	223	3,177	1,224	1,350	12,463	3,853	43	16,359
1939-40	6,666	203	3,173	1,203	1,403	12,648	3,498	42	16,188
1940-41	6,241	212	3,578	1,153	1,542	12,726	3,997	102	16,825
1941-42	5,119	178	3,994	1,222	1,997	12,510	3,902	146	16,558
1942-43†	6,607	216	5,196	1,239	2,772	16,030	5,314	40	21,384
1943-44†	7,130	251	5,250	1,347	2,227	16,205	7,143	196	23,544
1944-45†	6,106	207	6,083	1,330	2,756	16,482	8,693	228	25,403
1945-46†	6,619	260	7,299	1,482	2,421	18,081	9,108	119	27,308

† Values for milk and milk products are inclusive of subsidy (see page 551).

## PRICES OF FARMYARD PRODUCTS.

The average wholesale prices obtained in the Sydney markets for the principal kinds of dairy and poultry farm produce in each of the last seven years are shown in the following table. The average quoted for the year represents the mean of the prices ruling each month, and does not take into account the quantity sold during the month. Prices for poultry were quoted per lb. live weight in the months December, 1943, to April, 1944.

TABLE 534.—Prices (Wholesale) of Dairy and Farmyard Products,  
1939 to 1946.

Dairy and Poultry Farm Produce.	1939.	1941.	1942.	1943.	1944.	1945.	1946.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Milk ... gal.	1 5·2	1 5·2	1 9·2	1 9·3	1 9·3	1 8·7	1 8·5
Butter ... lb.	1 5	1 5	1 5·8	1 5·9	1 5·9	1 5·9	1 5·9
Cheese ... „	0 11	0 10·8	1 0	1 0·2	1 0·2	1 0·2	1 0·2
Hams ... „	1 3·9	1 4·3	1 5·9	1 7·2	1 7	1 7·2	1 7·2
Bacon (sides) ... „	0 11·7	1 0·1	1 1·7	1 2·8	1 2·9	1 3·5	1 3·5
Eggs (new laid) doz.	1 4·4	1 4·3	1 7·8	1 10·2	1 10·5	1 11·2	1 9·8
Poultry—							
Fowls—							
(Cockerels) pr.	6 5	6 7	8 0	9 9*	11 8*	10 11	10 6
Drakes—							
(Muscovy)... „	9 9	10 3	13 5	10 1*	17 1*	14 8	14 9
Ducks—							
(Muscovy)... „	6 5	6 6	8 3	16 7*	9 8*	8 6	8 9
Turkeys (cocks) „	28 1	23 9	32 8	44 1†	44 7*	42 7	43 3
Bee produce—							
Honey ... lb.	0 4·1	0 4·8	0 5·3	0 6·1	0 6·2	0 7·5	0 7·5
Wax ... „	1 4·9	2 0·9	2 4·5	2 5·4	2 5·8	2 6	2 6

\* Average, January to November, inclusive, in 1943 and May to December, inclusive, in 1944.

† Average, April to November, inclusive, 1943.

A table showing index numbers of prices of dairy and farmyard products, compiled from the weighted average prices of butter, cheese, bacon, ham, eggs, condensed milk, honey and lard was published on page 797 of the 1941-42 and 1942-43 edition of the Year Book.

The index numbers showed that the general level of prices of these commodities decreased by 36 per cent. during the years of depression, 1929 to 1933, rose steadily from 1934 to 1938, remained at about 20 per cent. below the level of 1929 from 1938 to 1941 and then in 1942, moved up to within 13 per cent. of the pre-depression level.

War-time distortions affecting weighting and consistency of quotation of some items preclude compilation of index numbers for later years.

## FORESTRY

### *The Forest Estate.*

THE forest lands of the State containing timber of commercial value consist of about 11 million acres, of which about 8 million acres are Crown lands. Over 6½ million acres of the State lands are either dedicated or reserved for the preservation and growth of timber.

The total forest area, although not large, contains a great variety of useful timbers, which in hardwoods include such renowned constructional woods as ironbark, tallow-wood, spotted gum, blackbutt, red mahogany, and turpentine. Other varieties include such valuable timbers as cedar, beech, brushbox, hoop pine, coachwood, native cypress pine, and teak. It is estimated that, in the National and State forests, extending over 5,200,000 acres, some 2,880,000 acres carry hardwood forest, 1,630,000 acres carry cypress pine with some ironbark, and 690,000 acres carry brushwoods and mixed hardwood brush. The balance of the Crown forest estate consists of timber reserves (1,296,000 acres) carrying poorer quality hardwood for fuel and general purposes.

The Forestry Commission, consisting of one member appointed for seven years, administers the Forestry Act, 1916-1946, subject to the control of the Minister for Conservation. The Act provides for the control and management of the State forests and timber reserves, the licensing of timber-getters and sawmills, and the organisation of a system of education in scientific forestry and research. Provision is made also for the permanent dedication of reserves for the preservation of natural flora, for the protection of water supply catchment areas, and for the prevention of erosion.

The Forestry Commission may undertake the silvicultural management of the catchment area of any system of water supply, and the direction of tree planting schemes of public authorities.

### *National and State Forests.*

Areas suitable for permanent use for forestry purposes may be declared as National forests, and the dedication may be revoked only by Act of Parliament. Land dedicated as a State forest may be withdrawn from forestry purposes by a resolution of both Houses of Parliament. Timber reserves are usually temporary reservations, revocable by executive act, protecting forest lands pending removal of timber, examination as to suitability for permanent dedication, or disposal of the lands for settlement or other public purposes.

As at 30th June, 1946, there were 696 State and National forests containing a total area of 5,258,142 acres of Crown lands which had been dedicated permanently for this purpose, and 412 timber reserves with 1,295,948 acres which had been set apart tentatively. Included in the State forests is a number of forest plantations of an aggregate area of 29,584 acres.

### *Location of Forest Lands and Main Forest Types.*

A description of the timber zones of New South Wales and of the principal types of timber to be found in them was published on pages 671 and 672 of the Year Book for 1928-29.

*Forest Management.*

Plans of development have been laid down for some of the principal State Forests after intensive survey and detailed mapping with the object of sustaining productive capacity. Cutting is controlled with due regard to regeneration and supplemented by silvicultural treatment to increase the forest yield. Regeneration of indigenous species is almost entirely natural, but the planting of some valuable varieties may be necessary; experimental work is proceeding and plantings of hoop pine have been made.

There are 27,471 acres of exotic pine (principally *Pinus radiata*) plantations. It was found in 1935 and 1936 that some of these plantations were on inferior sites and their continuance was not warranted. Since 1935 plantations may be established only with Ministerial consent, after proof of the suitability of sites. The Government has approved a twenty-six years' programme of planting of exotic and hoop pine. During the war a large supply of case timber was obtained by thinning from the plantations, and considerable areas of land on the tablelands have been recommended for afforestation with exotic pine as part of post-war plans to meet expansion in local demand for such timber.

Silvicultural and fire-protection work is continuous. The war led to acceleration of construction of forest access roads, of which there is an extensive system. Fire-breaks, fire-lines, and fire-roads (which also give access for logging) have been established for fire protection. Other works include look-out towers at strategic points, an interlocking system of forest water supplies, equipment huts and telephone lines. Radio communication serves the Pilliga National Forest and its use is being extended to other areas. The Royal Australian Air Force makes daily summer patrols of forest areas on the coast and southern tablelands and special observation flights in periods of great fire hazard.

*Production and Consumption of Timber.*

The following summary shows the number of timber mills in operation, the number of employees working therein (exclusive of carters, etc.), and the output of sawn timber in each year since 1935-36:—

TABLE 535.—Sawmills—Output of Timber, 1935-36 to 1945-46.

Year ended 30th June.	Mills Operated.	Average Number of Persons Employed.	Output of Sawn Timber.				
			Native.		Imported.		Total.
			Softwood.	Hardwood.	Softwood.	Hardwood.	
	No.	No.	Thousand super. feet.				
1936	440	4,289	45,537	87,806	56,961	...	190,304
1937	429	4,803	48,849	97,080	62,479	1,134	209,542
1938	425	4,925	48,518	119,524	120,345	627	289,014
1939	435	4,981	49,840	129,510	101,051	768	281,169
1940	447	4,915	63,201	129,273	75,291	696	268,461
1941	485	5,229	81,275	137,745	40,433	1,468	260,921
1942	556	5,665	95,916	160,988	11,543	2,972	271,419
1943	532	5,431	85,806	164,211	454	165	250,636
1944	585	5,474	88,751	170,284	2,825	1,099	262,959
1945	605	5,935	75,769	170,204	769	596	247,338
1946	645	6,277	72,082	180,025	1,017	1,026	254,150

The output of native sawn timbers rose from an average of about 150,000,000 super. feet in the five years ended 1938-1939 to about 253,000,000 super. feet in the five years ended 1945-46, attaining a record of 259,000,000 super. feet in 1943-44.

The quantity of imported softwoods treated in the sawmills increased from 3,993,000 super. feet in 1931-32 to 120,345,000 super. feet in 1937-38. During that interval customs duties on imported sawn timber were raised, and an increased proportion of the timber was imported unsawn and treated in local sawmills. The quantity declined greatly during the war period owing to difficulties of supply and of ocean transport, and needs have been met mainly from local timbers. The quantities of native softwoods and hardwoods sawn were 80 and 57 per cent. greater, respectively, in 1940-41 to 1944-45 than in the five years ended 1938-39. The output of native softwoods was greatest in 1941-42 and decreased progressively in later years and of hardwoods increased in each year 1937-38 to 1945-46. In 1945-46 the quantities sawn were 52 and 76 per cent., respectively, in excess of the pre-war averages.

The following table shows the annual gross consumption of native and imported timbers as estimated by the Forestry Commission:—

TABLE 536.—Consumption of Timber, 1924-25 to 1945-46.

Period.	Estimated Gross Consumption of Timber.					
	Native.				Imported from Oversea.	Grand Total.
	Softwood.	Hardwood.	Pole and Pile Timber and Fuel.	Total Native.		
	Thousand.					
	cubic feet.	cubic feet.	cubic feet.	cubic feet.	cubic feet.	cubic feet.
	Average per annum.					
1925-29	7,120	20,392	13,023	40,535	17,040	57,575
1930-34	4,417	15,971	12,113	32,501	7,447	39,948
1935-39	8,587	26,260	14,424	49,271	17,000	66,271
1940-44	11,034	27,004	15,657	53,695	5,000	58,695
	Year ended 30th June.					
1938	8,774	23,955	15,010	47,739	20,000	67,739
1939	8,202	28,137	10,911	47,250	17,000	64,250
1940	8,616	29,336	17,902	55,854	13,000	68,854
1941	12,249	25,786	20,049	58,084	4,000	62,084
1942	13,317	24,502	11,980	49,799	3,000	52,799
1943	10,405	25,550	14,414	50,369	2,000	52,369
1944	10,582	29,846	13,941	54,369	3,000	57,369
1945	10,407	33,617	8,667	52,691	2,500	55,191
1946	10,271	35,105	5,514	50,890	5,800	56,690

The production and use of timber was controlled under National Security Regulations between March, 1942, and December, 1946.

Under the Timber Marketing Act, 1946, timber must be sold true to description. For the protection of consumers restrictions are placed on the use in buildings and articles for sale of untreated borer-susceptible timbers and of unseasoned timber in furniture, joinery, flooring and mouldings where borer attack or excessive moisture would prejudice its serviceability.

*Value of Production from Forestry.*

The value of forestry production as at the place of production in New South Wales at intervals since the year 1901 is shown below:—

TABLE 537.—Value of Forestry Production, 1901 to 1945-46.

Year ended 30th June.	Value.	Year ended 30th June.	Value.
	£		£
1901*	554,000	1938	2,179,000
1906*	1,008,000	1939	2,261,000
1911*	998,000	1940	2,347,000
1916	1,045,000	1941	2,576,000
1921	1,656,000	1942	3,159,000
1926	2,202,000	1943	3,155,000
1931	1,237,000	1944	3,285,000
1936	2,014,000	1945	3,321,000
1937	2,096,000	1946	3,745,000

\* Calendar year.

The value of production, which had been trending slowly upwards since 1931-32, increased by 22½ per cent. in 1941-42. The value in 1945-46 was 79 per cent. above the average for the five years ended 1938-39 and 13 per cent. greater than in 1944-45.

*Imports and Exports of Timber.*

In the following table particulars are shown regarding the overseas imports and exports of timber to and from New South Wales at intervals from 1920-21 to 1945-46.

The large importation prior to the war was due mainly to the demand for softwoods, the great bulk of which was drawn from New Zealand, the United States of America, Canada, Norway, and Sweden.

TABLE 538.—Oversea Imports and Exports of Timber, 1920-21 to 1945-46.

Year ended 30th June.	Imports Oversea to New South Wales.				Exports of Australian Produce Oversea from New South Wales.			
	Undressed.		Other.	Total Value.	Undressed.		Other.	Total Value.
	Quantity.	Value.			Quantity.	Value.		
	sup. feet. (000)	£ stg.	£ stg.	£ stg.	sup. feet. (000)	£A.	£A.	£A.
1921	93,303	1,904,064	174,010	2,078,074	23,202	447,653	17,072	464,725
1920	187,009	1,919,846	301,343	2,221,189	13,989	241,504	7,408	248,012
1931	47,825	2,04,029	14,428	208,457	16,384	228,561	13,431	241,992
1936	190,578	665,696	36,926	702,622	22,599	233,433	2,703	236,136
1937	187,924	674,060	39,942	714,002	27,350	365,725	3,859	369,584
1938	206,513	922,866	61,201	983,567	28,103	416,494	41,453	457,947
1939	199,123	780,944	45,109	826,053	27,251	382,584	39,053	421,637
1940	150,431	774,686	44,429	819,115	19,098	306,322	57,958	364,280
1941	50,683	371,869	43,246	415,115	16,305	270,236	74,833	345,069
1942	35,372	286,833	39,394	326,227	19,863	360,876	84,015	444,891
1943	19,729	222,233	23,152	245,385	12,943	278,409	11,443	289,852
1944	30,744	306,007	43,779	349,786	9,885	229,526	1,363	230,889
1945	54,758	582,788	53,755	636,543	8,809	609,972	3,138	213,116
1946	66,004	774,027	86,252	860,279	12,708	300,805	12,265	313,070

*Finances of Forestry Commission.*

A summary of the receipts and payments of the Forestry Commission in the last six years is shown in the following tables:—

TABLE 539.—Receipts of Forestry Commission.

Year ended 30th June.	Royalty on Timber.	Permits, Inspection Fees, etc.	Rent of Forest Lands.	Sales.	Penalties, Damages, etc.	Total Receipts.
	£	£	£	£	£	£
1941	242,203	11,565	24,598	26,487	1,956	306,809
1942	308,526	10,729	25,035	46,896	2,016	393,202
1943	335,092	11,213	25,433	90,778	5,425	467,941
1944	338,546	12,494	27,777	136,318	15,685	530,820
1945	326,574	13,525	28,142	187,666	16,409	572,316
1946	299,737	16,464	27,980	175,370	6,043	525,594

Sales consist largely of timber converted by the Commission, but include £4,178 in 1940-41, £12,834 in 1941-42 and £267 in 1942-43 in respect of charcoal production undertaken as a war measure to provide a substitute for liquid fuel.

Payments by the Commission are related substantially to the development of forest areas, from which no immediate return may be expected. Therefore, receipts may not be related to the payments in any particular year.

TABLE 540.—Payments by Forestry Commission.

Particulars.	Year ended 30th June.					
	1941.	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£	£
Administrative—						
Central ... ..	51,205	52,145	52,455	57,369	62,508	40,859
District ... ..	57,014	65,033	68,981	92,581	68,906	84,160
Research ... ..	14,304	16,195	17,999	19,918	20,881	25,537
Development and Reafforestation—						
Acquisition of Land ... ..	5,322	4,394	5,760	7,242	9,942	3,058
Forest Surveys ... ..	4,532	6,589	5,551	6,740	5,968	13,014
Sylviculture and Nurseries ... ..	35,969	41,723	29,394	31,473	31,971	42,751
Protection ... ..	38,466	58,872	40,485	45,693	56,770	55,841
Access Roads ... ..	102,330	109,783	74,737	81,825	69,089	58,674
Other Improvements, Plant, etc. ... ..	56,904	111,806	107,682	100,824	110,220	124,206
Supervision of Licenses ... ..	5,000	20,621	25,462	30,581	36,257	41,953
Logging Operations ... ..	29,465*	40,632	83,205	124,723	117,768	105,347
Total ... ..	420,511	528,393	517,621	598,969	590,280	595,400

\* Includes £22,244 on charcoal production.

The item "logging operations" relates to departmental logging work initiated by the Forestry Commission to ensure a supply of special timbers for defence purposes. The costs are charged to the miller and are subsequently reimbursed to the State Treasury. The item, therefore, is self-liquidating.



## FISHERIES

THE waters along the coast of New South Wales contain many species of fish of high commercial value, but the fishing industry has not been developed to its full capacity. The principal sources of supply of marine fish are the coastal lakes and estuaries, the sea beaches, and ocean waters, and a large quantity is obtained by deep-sea trawling. Murray cod is obtained in the inland rivers.

In September, 1936, the Commonwealth Government appointed an Officer in Charge of Fisheries Investigations, with the object of ascertaining the possibilities of extending the fishing industry in Australia. The Commonwealth Council for Scientific and Industrial Research is engaged in exploring the resources of fish in Australian waters, and a special research vessel is employed in that work. There is a National Fisheries Laboratory and Research Station at Port Hacking.

### CONTROL OF THE FISHERIES.

Fisheries in New South Wales are regulated under the Fisheries and Oyster Farms Act, 1935-42, which came into operation on 16th November, 1936. The Chief Secretary administers the Act, which provides for the protection, development and regulation of the fisheries of the State within territorial limits. Fisheries in Australian waters beyond territorial limits are within the jurisdiction of the Commonwealth. The Commonwealth Whaling Act, 1935, gives effect to the Convention for the Regulation of Whaling signed at Geneva on 4th September, 1931, and governs operations in Australian waters beyond territorial limits by all ships under Commonwealth jurisdiction.

Inspectors appointed under the Fisheries Act assist in administering the law and members of the police force may exercise the powers and duties of an inspector. Honorary vigilance committees also may be given inspectorial powers in terms of the regulations. Control is secured by authority to close waters to the taking of fish, either wholly, as to a certain season, or in respect of prescribed species or sizes of fish; the licensing of fishing boats and fishermen operating for pecuniary gain; the regulation of the use of nets; and the prohibition of the use of explosives in fishing. There are provisions governing the consignment and sale of fish, and the licensing of fish agents and salesmen; and returns must be furnished to disclose the nature and extent of fishing operations.

Experiments and research may be undertaken in the interests of the fisheries. For the purpose of stocking waters with trout and salmon, acclimatisation districts are declared, and acclimatisation societies are registered to control the fisheries therein. The close season for trout is from 1st May to 30th September of each year, but may be varied by proclamation. A license is required for trout or salmon fishing, and the method of trout fishing is subject to regulation.

### *Marketing of Fish.*

Control of the Sydney fish markets was assumed by the Chief Secretary on 17th September, 1945, under the Fisheries and Oyster Farms (Amendment) Act, 1942. This was done in furtherance of a scheme under which

fishermen's co-operative organisations are being encouraged with the aim of ultimately having all fish marketed by an association of co-operative societies. Government assistance is given fishermen at main fishing centres to establish societies and at 30th June, 1946, two of these, at Grafton and Laurieton, were functioning. A Fish Marketing Advisory Committee representative of all fishing industry organisations was set up in 1945-46.

Pending the establishment of decentralised markets at fishing centres all fish must be consigned for sale to the Sydney or Newcastle market, except where independent local sales are permitted through the issue of Ministerial "consents".

#### *Fishing Licenses.*

Licenses were issued to 3,872 fishermen in the year ended 30th June, 1944, to 4,509 in 1944-45, and to 6,047 in 1945-46. Fishing boat licenses numbered 2,984, 3,234, and 3,892, and oyster vendors licenses 365, 335, and 383 in the respective years. Fishermen and oyster vendors pay an annual fee of 10s. Fees for fishing boats in territorial waters are 10s. per year, and for boats trawling and net fishing in extra-territorial waters fees are £5 for vessels up to 100 tons, £7 10s. from 100 to 200 tons, and £10 for vessels exceeding 200 tons. Boats operated in extra-territorial waters not trawling or netting pay fees of £1 up to 30 feet in length and £2 if more than 30 feet.

#### OYSTER FARMS AND OYSTER LEASES.

Oyster culture has developed into an industry of some importance. As at 30th June, 1946, there were 4,667 leases, embracing 944,237 yards of foreshores and 4,288 acres of offshore land, and 755 persons were engaged in oyster farming operations.

Under the Fisheries and Oyster Farms Act, 1935-1942, the available areas are classified as special, average or inferior lands according to productive capacity. Leases of special lands may be granted for a term of fifteen years, and may be renewed for a similar term. Such leases are offered by public auction or public tender at a rental determined by the Minister. The rent of average lands, which may be leased for a term of fifteen years, and renewed for a like term, is fixed by the Minister. Inferior lands may be leased for ten years, and may not be exploited in the first year of the lease. Rental for leases of inferior lands is also fixed by the Minister. In the last year of the lease the area may be reclassified, and the lease renewed for fifteen years if determined as average lands, or for ten years if the classification is unaltered.

In all cases rental as determined by the Minister is subject to reference to the local land board, either on the application of an applicant or by the Minister.

The discoverer of a natural oyster bed has a statutory prior right to a lease of the area, unless it be classified as special lands.

Preferment rights to apply for the renewal of leases of inferior or average lands and for additional similarly classified lands is conferred upon existing lessees, but must be exercised within thirty days of the right arising. Applicants other than lessees, and lessees whose areas are deemed inadequate have a preferment right to an area as against other applicants with adequate lands, except lessees eligible for renewal of leases, or for securing areas immediately adjoining the off-shore boundary of leases having frontage to high-water mark.

Leased areas must be kept free from disease, and may be closed when over-dredged, subject to disease, or for other reason which in the Minister's opinion warrants such a course.

Public oyster reserves may be notified, and such areas are open to the public for the taking of oysters for their own immediate consumption, unless specifically declared closed.

During the year 1945-46 applications were granted for oyster leases covering 48,275 yards of foreshore and 267 acres of off-shore leases.

#### PRODUCTION OF FISH.

The most important kinds of fish marketed are mullet, flathead, salmon (sea), blackfish, bream and snapper, leather jackets, whiting, tailer, garfish, nannegai and morwong. Murray cod is the principal variety of fresh-water fish.

The production of fish, oysters, prawns, crabs and crayfish as recorded since 1937 is shown in the following table. The figures relate to commercial enterprises only:—

TABLE 541.—Production of Fish, 1937 to 1945-46.

Calendar Year.	Fish.			Oysters.	Prawns.	Crabs and Crayfish.
	Trawled.	Captured Otherwise.	Total.			
	lb.	lb.	lb.	bags.*	lb.	doz.
1937	12,525,200	14,006,391	26,531,591	42,106	995,460	17,120
1938	14,145,583	15,236,835	29,382,418	44,521	1,580,580	19,070
1939	13,340,940	17,502,445	30,843,385	40,681	1,069,050	17,350
1940	9,897,810	17,428,600	27,326,410	43,324	993,480	14,127
1941	5,278,070	18,690,140	23,968,210	42,965	982,180	13,600
1942†	6,862,800	18,984,683	25,847,483	45,566	1,064,695	14,998
1943†	2,240,062	19,523,470	21,763,532	41,473	1,551,747	14,059
1944†	2,275,140	21,526,226	23,801,366	32,112	1,489,971	10,213
1945†	10,069,807	19,980,816	30,050,623	34,811	1,692,024	17,267
1946†	12,791,875	17,876,977	30,668,852	38,642	1,246,857	36,845

\* Three bushels.

† Year ended 30th June.

The production in 1945-46 consisted of inshore catch 17,678,000 lb., trawled fish 12,792,000 and inland catch, 199,000 lb. The inshore catch including mullet 7,617,681 lb., salmon 1,593,152 lb., blackfish 866,821 lb., leather jackets 1,283,340 lb., and flathead 947,235 lb. The trawled fish included 6,585,717 lb. of flathead and the inland catch 90,748 lb. of Murray cod.

Diversion of fishing vessels to war purposes and the consequent decrease in trawled fish accounted for the war-time decrease in fish production. Some steam trawlers were released by the Navy, and additional Danish Seine boats were used in 1944-45 and 1945-46, and production increased again to the pre-war level. In these years there were, respectively, four and five steam trawlers, 44 and 50 Danish Seine boats, and 196 and 247 men employed in trawling fish at 30th June.

Most of the recorded production is marketed in the Metropolitan and Newcastle districts. Sales at the Sydney Municipal Fish Markets in 1944-45 amounted to 22,383,260 lb. of fish, 1,064,130 lb. of prawns and

14,900 dozen crayfish and crabs. Particulars of sales in 1945-46 other than of fish (20,230,576 lb.) are not available.

The greater proportion of the inshore supplies is obtained in the estuaries and lakes on the northern part of the coast line. The approximate quantities of fresh fish obtained in various sectors of the coast during recent years are indicated below:—

TABLE 542.—Production of Fish in Various Waters, 1941-42 to 1945-46.

Division.	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
	Thousand lb.				
North Coast—Q'land Border to Macleay R....	5,710	6,566	7,894	8,373	5,887
Hunter—Manning—Hastings R. to Terrigal H.	6,121	5,409	5,247	5,631	5,640
Metropolitan—Hawkesbury R. to P. Hacking	1,330	2,390	2,957	2,299	1,900
South Coast—L. Illawarra to Vic. Border ...	5,352	4,490	4,912	4,787	3,883
Ocean Waters—Undefined ... ..	261	279	574	702	368
Trawled Fish ... ..	6,863	2,240	2,275	10,070	12,792
Inland Waters ... ..	210	390	242	189	199
Total ... ..	25,847	21,764	23,801	30,051	30,669

#### OVERSEA TRADE IN FISH.

Normally a considerable proportion of Australian requirements of fish is imported. During the war (1939-45) most of the fish imported was reserved for the Services.

Oversea imports of fish into New South Wales were 19,444,703 lb. (including 12,692,306 lb. in tins) valued at £stg.643,006 in 1938-39; 12,940,216 lb. valued at £stg.657,853 in 1944-45; and 4,364,524 lb. valued at £stg.267,420 in 1945-46. The greater part of the fish imported in 1944-45 and 1945-46 was re-exported. Exports oversea (almost wholly of non-Australian origin) totalled 603,016 lb. in 1938-39; 3,837,818 lb. in 1944-45; and 9,123,437 lb. in 1945-46.

#### VALUE OF FISHERIES PRODUCTION.

The value of the production from fisheries of New South Wales, as recorded during the year 1945-1946, was approximately £1,046,000, including fresh fish, £795,000; oysters, crayfish, prawns, etc., £251,000.

The value of production is estimated as at the place of production and is exclusive of fish condemned, of fish sold in fishing and other centres (and not recorded) or used for fertiliser and oil, and the value of molluscs other than oysters.

The following table shows the value of production from fisheries in various years since 1920-21:—

TABLE 543.—Value of Fisheries Production, 1920-21 to 1945-46.

Year.	Fish.	Oysters.	Prawns, etc.	Total.	Year.	Fish.	Oysters.	Prawns, etc.	Total.
	£000	£000	£000	£000		£000	£000	£000	£000
1921*	402	65	24	491	1939	387	81	40	508
1926*	412	82	59	553	1940	389	87	41	517
1931*	506	54	75	635	1941	484	86	49	619
1936	538	62	50	650	1943*	597	124	109	830
1937	435	79	34	548	1944*	562	96	70	728
1938	481	83	56	620	1945*	781	157	85	1,023
					1946*	795	174	77	1,046

\* Year ended 30th June.

## FISH PRESERVING.

Fish of many kinds specially suitable for treatment by canning, smoking, or salting is obtainable in the waters along the coast of New South Wales, and in recent years canning factories have been in operation at Narooma and Eden on the South Coast.

## FISH CULTURE AND ACCLIMATISATION.

Acclimatisation of trout has met with remarkable success in the State—trout up to 8 and 10 lb. are occasionally captured. Suitable streams, viz., practically all above an altitude of 2,500 feet, have been stocked with trout.



## LAND LEGISLATION AND SETTLEMENT.

An account of the land legislation of New South Wales in relation to the progress of settlement, describing the many forms of acquisition and tenure from the Crown is given in previous issues of the Year Book. The review of these matters given in this chapter affords a general indication of the manner in which the law relating to the control and disposal of Crown lands is administered, and indicates broadly the tenures under which landholders hold their lands.

### *Land Area, Territorial Divisions and Land Districts.*

The area of New South Wales is 198,037,120 acres, but excluding the surface covered by rivers, lakes, etc., the land area is 195,068,040 acres or about 304,793 square miles. The State is divided into three territorial land divisions—Eastern, Central and Western, bounded by lines running approximately north and south, as shown on the map in the frontispiece of the volume of this Year Book. The Eastern Division embraces the coastal and tablelands districts (exclusive of 601,000 acres of Commonwealth territory) covering 60,661,296 acres. The Central Division, extending over most of the western slopes and central plains, contains 57,055,846 acres, and the plain country beyond comprises the Western Division of 80,319,348 acres, most of which is under sparse pastoral occupation because of low rainfall.

### *Land Administration.*

The administration of the Crown lands passed entirely under local control on the establishment of responsible government in 1856. The Secretary for Lands, a Cabinet Minister, is responsible for the administration, and he is assisted by a Permanent Under Secretary with subordinate powers. Since 1901 the lands of the Western Division have been administered separately, first by a Board, and since 1934, by a Commission or Commissioner, responsible to the Secretary for Lands.

The principal enactments governing the control and disposal of Crown lands are the Crown Lands Consolidation Act, 1913, as amended, the Closer Settlement and Returned Soldiers' Settlement Acts, the Irrigation Acts, and the Western Lands Acts.

Since 1938, the Catchment Areas Protection Board, comprising the Minister for Conservation (as chairman), the Director of the Soil Conservation Service, and representatives of each the Department of Lands, Agriculture and Mines and of the Water Conservation and Irrigation and the Forestry Commissions, has exercised oversight over the disposal of lands within the principal catchment areas of the State (see page 403).

### *Land Boards and Land and Valuation Court.*

The Eastern and Central Divisions are divided into ninety-one Land Districts with a Crown Land Agent in each. The Land Districts are grouped into a number of Land Board Districts, with a District Sur-

veyor in each. There are special Land Board Districts for the Yanco, Mirrool and Coomealla Irrigation Areas. Land Districts of the Western Division coincide with Pastures Protection Districts.

In each Land District, a Local Land Board with an official chairman and two local members, sitting in open court, determines many matters under the Lands and other Acts. The Local Land Boards of the Western Division are comprised of the Commissioner, an Assistant Commissioner and one local member.

The Land and Valuation Court, which superseded the Land Appeal Court in 1921, gives awards and judgments having the same force as those of the Supreme Court on appeals, references and other matters under the Crown Lands Acts, Closer Settlement Acts and certain other Acts concerned with the use, value and ownership of land. Further particulars regarding Local Land Boards and the Land and Valuation Court are given in the chapter "Law Courts".

#### *Reserves.*

Throughout the State considerable tracts of land, totalling 17,872,410 acres at 30th June, 1946, have been reserved from sale (some from lease, also) in the public interest, for various purposes, the principal being travelling stock reserves, temporary commons, mining, forestry, and recreation reserves and parks. Some lands are reserved pending survey and classification. The reserves are subject to review periodically, and are revocable by executive act when their retention is found unnecessary. The following is a statement of reserved areas; it includes land permanently dedicated for State Forests, National Parks, commons, railways, cemeteries, etc., and thus does not purport to show the area of Crown lands set aside for community purposes:—

TABLE 544.—Reserves, Kinds and Area, 30th June, 1946.

Classification.	Area.	Classification.	Area.
	acres.		acres.
Travelling Stock ... ..	5,329,493	Recreation and Parks ...	419,816
Water and Camping ...	835,783	For Classification and Survey	3,893,786
Mining ... ..	1,224,836	From Conditional Purchase in Goldfields ... ..	422,726
Forest ... ..	2,076,631	Other ... ..	3,378,781
Temporary Common ...	255,484		
Railway ... ..	35,074	Total ... ..	17,872,410

Apart from these land reservations there are considerable portions of the coastal and tableland regions which are too rugged and barren to be suitable for settlement. It is estimated, however, that the area of land within the State unfit for occupation of any kind is less than 5,000,000 acres.

*Land Settlement Policy.*

In New South Wales the area of rural land under private tenancy is relatively inextensive; most of the land is held in fee simple or in process of purchase or under lease from the Crown. In the early days of settlement up to 1884 lands were alienated by grants from the Governor; sales from the Crown commenced in 1831, and leasehold tenures were given to "squatters" after 1832. Conditional purchase under the "free selection before survey" system was introduced in 1861 to open to landseekers means of acquiring land already held under lease, and the system continued until 1884. Since 1895 the principles governing the disposal of Crown land have been pre-classification of land, survey before selection, each holding of sufficient size to provide a "living area", one man one selection, and *bona fide* selection. Sales at or after auction have decreased in importance. Closer settlement, described later herein, has been an important factor in providing for new settlers during the greater part of this century.

In general, the methods of disposal of Crown lands have been designed to ensure individual private ownership. Various leasehold tenures were introduced around the turn of the century but as the result of recent provisions for the conversion of home maintenance areas within leases from the Crown to leases in perpetuity, most of the lands of the State are now either alienated, in course of alienation, or carry rights to alienation. Nearly all tenures of land carrying rights of alienation have been granted and made transferable subject to a condition of residence by the holder, and many of the tenures require substantial improvements to be effected within a prescribed period. These provisions have as their objects the promotion of effective settlement and prevention of the aggregation of large areas in private ownership.

*Alienation of Land.*

In the Eastern and Central Divisions there were 102,795,259 acres under occupation at 30th June, 1946, and of that area 94,112,925 acres (or 91.5 per cent.) were absolutely or virtually alienated, in course of alienation or held under leases wholly alienable by lessees. Practically all of the Western Division is suitable for sparse pastoral occupation only; most of it is leasehold, but conversion to leases in perpetuity is permissible in many cases. The progress of alienation of land within the State at intervals since 1861 is indicated in the following statement:—

TABLE 545.—Area of Alienated Lands, 1861 to 1946.

At 31st December.	Area Absolutely Alienated.	At 30th June.	Area of Freehold Resumed for Re-Settlement.	Area Remaining Absolutely Alienated.	At 30th June.	Area of Freehold Resumed for Re-Settlement.	Area Remaining Absolutely Alienated.
	'000 acres.		'000 acres.	'000 acres.		'000 acres.	'000 acres.
1861	7,147	1911	606	38,234	1912	2,517	50,844
1871	8,631	1921	1,857	39,680	1943	2,517	51,054
1881	19,615	1931	2,406	44,075	1944	2,517	51,208
1891	23,683	1936	2,414	46,204	1945	2,517	51,440
1901	26,407	1941	2,516	50,283	1946	2,574	51,638

Particulars of the various ways in which alienation had been effected up to 30th June, 1944, are given in Table 752 of the 1941-42 and 1942-43 edition of the Year Book, pages 816 to 818 of which issue describe the



methods of purchase. Of the gross area of 54,455,950 acres absolutely alienated up to 30th June, 1946, that acquired by conditional purchase was 31,686,702 acres, by grant or sale by private tender or public auction prior to 1862 was 7,146,579 acres, and by auction or after-auction purchase and under deferred payment sales since 1862, 11,596,276 acres.

The foregoing statement includes only land in respect of which deeds had been issued; the additional areas in respect of which the Crown is committed to confer freehold title upon holders upon completion of payments and fulfilment of conditions are indicated in the next table. Beside 17,478,571 acres in course of alienation or virtually alienated 27,122,988 acres were within leases alienable in their entirety, and a further 1,367,212 within long-term leases carrying limited rights of alienation. Of the area under long term leases in the Western Division 50,817,107 acres or over 70 per cent. comprised leases in perpetuity.

*Disposal of Lands and Area of Tenures.*

The next table provides a brief summary of the manner in which the lands of the State were held at 30th June, 1946, distinguishing those in the Western Division from the remainder of the State:—

TABLE 546.—Disposal of Lands and Area of Tenures, 30th June, 1946.

Manner of Disposal.	Area.		
	Eastern and Central Divisions.	Western Division.	Whole State.
	acres.	acres.	acres.
(1) Alienated ... ..	65,404,844	2,039,658	51,637,515
(2) In course of alienation ... ..			15,806,987
(3) Virtually Alienated ... ..			1,671,584
(4) Alienable Leases (long-term and perpetual) ... ..	27,037,616	85,372	27,122,988
(5) Long-term Leases with limited rights of alienation ... ..	1,269,187	98,025†	1,367,212
Total of foregoing tenures ...	95,382,112	2,224,174	97,606,286
(6) Other Long-term Leases* ...	936,829	72,420,035	73,356,864
(7) Short leases and temporary tenures	4,179,616	4,879,037	9,058,653
(8) Forest leases and permits within State Forests ... ..	2,113,734	.....	2,113,734
(9) Mining leases and permits ...	182,968	12,746	195,714
(10) Neither alienated nor leased (includes reserves, State forests not occupied, roads, stock routes, etc.) ... ..	14,922,513	783,356	15,705,869
Total Area ... ..	117,717,772	80,319,348	198,037,120

\* Includes perpetual Western Lands Leases, 50,719,082 acres.

† Perpetual.

Of the land in process of alienation 13,315,504 acres were held in conditional purchases, 2,042,725 acres in settlement purchases, 235,763 acres in soldiers' group purchases, and 147,652 acres in irrigation land purchases. The land virtually alienated comprised homestead grants and homestead selections.

*Kinds and Area of Land Leases.*

The total area of Crown land in New South Wales held under lease, occupation license and permissive occupancy was 114,886,749 acres at 30th June, 1946, inclusive of 35,000,585 acres under the Crown Lands Act, 77,327,534 acres under the Western Lands Act, 2,097,582 acres under the Forestry Act, 195,714 acres under the Mining Act, and 265,334 acres under the control of the Water Conservation and Irrigation Commission. The area under each tenure at 30th June, 1946, is shown below:—

TABLE 547.—Kinds and Area of Leases of Crown Land, 30th June, 1946.

Nature and Name of Tenure.	Area.	Nature and Name of Tenure.	Area.
	acres.		acres.
<i>Virtually Alienated—</i>		Conditional Lease brought under Western Lands Act (Perpetual)	98,025
Homestead Selection and Homestead Grant ... ..	1,671,584	Prickly Pear Lease ... ..	148,978
<i>Alienable—Long-term and Perpetual—</i>		Residential Lease ... ..	5,288
Homestead Farm ... ..	4,735,123	Special Lease ... ..	957,383
Closer Settlement Lease ... ..	24,756	Group Total ... ..	1,367,212
Suburban Holding ... ..	53,910	<i>Other Long-term—</i>	
Settlement Lease* ... ..	2,773,054	Western Lands Lease, Perpetual	50,719,082
Settlement Purchase Lease ... ..	751,682	„ „ Other ... ..	21,700,953
Crown Lease* ... ..	7,339,156	Group Total ... ..	72,420,035
Conditional Purchase Lease* ... ..	161,555	<i>Short-term and Temporary—</i>	
Group Purchase Lease ... ..	160,391	Snow Lease ... ..	653,135
Conditional Lease* ... ..	11,909,374	Annual Lease ... ..	514,276
Returned Soldiers' Special Holding ... ..	14,619	Occupation License ... ..	703,034
Week-end Lease ... ..	206	Preferential Occupation License	1,994,187
Town Lands Lease ... ..	66	Permissive Occupancy ... ..	5,064,612
<i>On Irrigation Areas—</i>		Irrigation Area Lease ... ..	129,409
Irrigation Farm Lease ... ..	121,051	Group Total ... ..	9,058,653
Non-Irrigable Lease ... ..	14,533	Forest Lease and Occupation Permit ... ..	2,113,734
Town Lands Lease ... ..	341	Mining Lease and Permit ... ..	195,714
Group Total ... ..	28,059,817	Grand Total ... ..	114,886,749
<i>Long-term, Limited Rights of Alienation—</i>			
Improvement Lease ... ..	68,264		
Scrub Lease ... ..	73,803		
Inferior Lands Lease ... ..	15,460		
Church and School Lands Lease	11		

\* New leases mainly perpetual; old leases convertible to perpetual leases.

The tenures listed in the foregoing table and the rights and obligations of their holders are described in some detail in the chapter "Land Legislation and Settlement" of the Official Year Book for 1941-42 and 1942-43. The multiplicity of tenures has arisen from legislative measures taken from time to time to adapt the conditions of occupation and acquisition of Crown land to the changing character of rural settlement, to meet the needs and circumstances of settlers, and to promote settlement throughout the State.

Reference in brief outline to important changes in the land laws are made in earlier paragraphs under the heading "Land Policy". The more important of the measures affecting land settlement during the present century are described briefly in succeeding pages. These have to do with re-settlement provisions under the Closer Settlement and Western Lands Acts, the settlement on the land of ex-servicemen of the wars of 1914-18 and 1939-45, the disposal of land in irrigation areas, and of land infested with prickly pear, and financial relief afforded settlers to mitigate the effects of the economic depression, 1929-33, upon their annual and capital liabilities to the Crown. Reference to the provisions made during this

period for security of tenure of long-term leaseholds by conversion to leases in perpetuity are made in preceding pages.

### CLOSER SETTLEMENT.

The circumstances leading to the adoption in 1906 of the "Closer Settlement Policy" are described at page 680 of the Year Book for 1928-29. At pages 832-838 of the 1941-42 and 1942-43 edition the manner of provision and disposal of land under this policy is dealt with in some detail.

The Closer Settlement Acts provide that private land and long-term leases may be acquired by the Crown in certain circumstances, by direct purchase or resumption, to provide for new holdings and for additions to existing holdings. Acquisition must be recommended by the Settlement Advisory Board and approved by Parliament. Under the Closer Settlement Promotion Act, three or more persons, or one or more discharged soldiers with prescribed qualifications, may enter into agreements with private land-owners to buy private lands, and ex-servicemen may agree to buy certain Land Act holdings on subsisting title from their holders. Given Ministerial approval, the Crown acquires the land from the vendors and disposes of it to settlers by instalment purchase or lease. The settlers may be required to obtain the maximum advances which may be secured on the land from the Rural Bank and to use the advances towards discharge of indebtedness to the Crown.

The following is a summary of closer settlement operations up to 30th June, 1946:—

TABLE 548.—Closer Settlement—Summary of Operations to 30th June, 1946.

Method of Acquisition.	Estates acquired.	Area.		Price paid for land acquired.	Farm Blocks made available.		
		Acquired.	Adjacent Crown Land.		No.	Area.	Value.
	No.	acres.	acres.	£		acres.	£
Direct Purchase ....	30	90,164	} 44,473	{ 506,855 293,195	} 686 376	} 309,672	1,331,018
Crown Lands Act (s. 197)*...	23	34,682					
Closer Settlement Acts—							
Promotion Provisions ...	1,653	1,823,333	13,097	8,480,135	3,960	1,835,740	8,347,853
Ordinary Provisions ...	78	1,300,636	114,682	5,626,586	3,303	1,555,559	6,115,552
War Service Land Settlement Scheme ...	3	52,508	...	248,012	45†	...	...
Resumption of Long-term Leases† ...	70	806,217	34,301	200,802	784	539,141	765,254
Total ...	1,857	4,197,540	206,553	15,355,585	9,154	4,240,112	16,569,677

\* Includes an estate of 21,300 acres surrendered at nominal value for returned soldiers.

† Includes 19,616 acres of improvement lease and 160,028 acres of scrub lease acquired at nominal value.

‡ Number to be made available.

The foregoing statement includes operations connected with the settlement of ex-servicemen of the wars of 1914-18 and 1939-45. Particulars regarding these are given in the next table. The conditions under which ex-servicemen acquired their holdings and the assistance given them to become established on the land in former years are outlined in previous issues of this Year Book; the subsisting provisions are described later in this chapter.

TABLE 549.—Settlement of Ex-servicemen—Estates Acquired and Farms Provided, to 30th June, 1946.

Method of Acquisition.	Estates.	Area.	Purchase Money.	Farms made Available.
	No.	acres.	£	No.
Promotion Provisions, Closer Settlement Acts* ... ..	1,457	1,198,502	5,578,946	2,282
Group Settlement—Closer Settlement Acts ... ..	25	896,081	1,809,729	887
War Service Land Settlement Scheme	3	52,508	248,012	45
Section 197, Crown Lands Act† ... ..	22	30,491	274,334	352
Purchase by authority of Executive Council ... ..	27	85,218	450,947	538
Total ... ..	1,534	1,762,780	8,361,968	4,054

\* Includes 958 single farms.  
a gift.

† Includes one estate surrendered at nominal value, practically as

Closer settlement effected under a voluntary subdivision scheme administered by the Closer Settlement Agency of the Rural Bank is excluded from the foregoing table. Under this scheme settlers who acquire farms in voluntarily subdivided private estates may obtain advances of 80 per cent. (66½ per cent. from the Bank plus 13½ per cent. from the Agency) of the Bank's valuation of the land. The number of settlers who have acquired holdings under this scheme is as yet relatively small.

#### *Settlement of Ex-servicemen—Recent Legislation.*

The War Service Land Settlement Agreement Act, 1945, supplements the War Service Land Settlement Act, 1941 (described in the previous issue) and provides for Commonwealth and State co-operation in the settlement of ex-servicemen on the land. The State is to find, subdivide, improve and develop the land to make it quickly productive after allocation, and to receive and deal with applications from ex-servicemen within five years of their discharge, or of the cessation of hostilities, whichever is later. One-half of the cost of so providing and developing the land in excess of its value with improvements is to be borne by the Commonwealth. Applicants, to be selected by the State, are to be trained and maintained during training and the first year of occupation by the Commonwealth, which also will bear one-half of the cost of remission of rent and interest payments in that year and of any loss to the State arising from advances made to settlers with Commonwealth concurrence. Land acquisitions under the scheme are to be made on the basis of values ruling on 10th February, 1942.

Principles to govern the settlement of ex-servicemen are that the number of applications accepted should be related to opportunities for sound economic production; that the settlers possess farming aptitude and experience; that holdings be of a size capable of efficient management and of returning a reasonable labour income; that lack of capital need not preclude selection but settlers should invest a reasonable proportion of their capital in the holdings; and that all settlers should be given adequate guidance and technical advice.

Under the scheme approved ex-servicemen may acquire land (mainly by ballot) out of land acquired, subdivided and developed by the State; by personal selection under methods similar to the settlement promotion

provisions of the Closer Settlement Acts, as previously outlined; or under perpetual lease from Crown lands set apart by the Minister. The transfer of any holding acquired under the scheme is forbidden for ten years, except to another qualified ex-serviceman or his dependant.

#### *Disposal of Western Lands.*

Within the Western Division, in areas where sparse pastoral activity only is practicable, much of the land was let originally by the Crown under long-term leases in very large holdings. In order to provide for new settlers or to build up to reasonable size the holdings of existing settlers, leases (most of which would have expired between 1943 and 1948) were made available under the Western Lands Amendment Act, 1934, for renewal for periods of 20 or 25 years but (with certain exceptions) only as to three-fourths of the original area, and subject to further withdrawal of another one-eighth in each 1943 and 1948. By a further provision made in 1942, the one-eighth withdrawable in 1948 was made withdrawable with few exceptions at any time after 25th August, 1943. Particulars of the operations under these provisions to 30th June, 1944, are given at page 830 of the Year Book for 1941-42 and 1942-43. The opportunity of settlers to convert long-term Western Land Leases to leases in perpetuity is referred to in earlier pages of this chapter, and the kind and area of Western Lands tenures are given in Table 546. The area of land alienated or in course of alienation in this Division at 30th June, 1946, was 2,039,658 acres.

#### *Prickly Pear Infested Lands.*

Considerable tracts of land in New South Wales (estimated at 7,600,000 acres in 1924) were infested with prickly pear in varying degree and special measures for its treatment and to prevent spread of the pest have been taken. Owners and occupiers are bound to keep uninfested land free of it, and under law, may surrender heavily infested land to the Crown under certain conditions. Leases of infested Crown lands are granted on conditions requiring and encouraging treatment for eradication, and a grant of the land may be made to any person who has freed heavily infested Crown land of the pest.

By poisoning and entomological control large tracts of densely infested lands have been treated successfully and over most of the State only scattered pear remains. However, considerable areas in the Scone-Bylong Valley infested with primary pear *Opuntia Inermis* (which has proved uncontrollable by the *Cactoblastis Cactorum* insect), and Tiger pear *Opuntia Aurantiaca* (susceptible to the Cochineal insect *Dactylopius Sp. near Confusus*) scattered along many rivers in the State, are major problems retarding pear eradication. Prickly pear seed retains fertility for many years, is spread widely by birds and animals, and germinates freely in bountiful seasons. Consequently many years of treatment of scattered pear by poisoning will be necessary to maintain the progress made in freeing the land of pear. Operations undertaken by the Commission during 1945 and 1946 comprised the distribution of cactoblastis and cochineal insects, the supply of poison at cost price to landholders, and the treatment by poisoning of pear on 74,434 acres in 1945 and 87,436 acres in 1946.

Further details regarding the treatment and occupation of prickly pear infested land are given at page 831 of the Year Book for 1941-42 and 1942-43, and the area under Prickly Pear Lease is shown in Table 547 of this edition.

*Land in Irrigation Areas.*

Settlers within irrigation areas generally hold their land under freehold title, tenures leading to alienation, or under leases convertible to alienable tenures. A residence condition frequently applies under Crown tenures and a requirement of improvements and satisfactory development of the land is usual. The principal tenures of irrigable lands in irrigation areas carry water rights varying according to the type and area of the holding.

At 30th June, 1946, there were in irrigation areas 1,867 acres alienated as Irrigation Farm Purchases, 147,652 acres in course of alienation as Irrigation Land Purchases, 135,925 acres in long-term alienable leases and 129,409 acres in other leases (including 31,978 acres outside irrigation areas but under control of the Water Conservation and Irrigation Commission).

*Financial Relief to Crown Settlers.*

The State Government provided financial relief to settlers to encourage them to remain on the land and to assist them to surmount the financial difficulties which arose during the economic depression of 1929-33. Their capital indebtedness and annual rentals were made subject to re-appraisal, rental and interest payments were reduced by 22½ per cent., and a maximum rate of interest of 4 per cent. was fixed in 1932. Settlers affected by flood, fire, drought, storm or tempest might have purchase instalments and interest payments thereon postponed, have interest payments and annual rent postponed, waived or remitted, and also have improvements in course of purchase re-valued. Provision for the funding of overdue debts to the Crown was made by Crown Lands Amendment Acts of 1932 and 1935, and that of 1941 authorised the waiver of interest or rent which had become payable before 1933 and had been postponed or funded.

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## FACTORIES.

Prior to the federation of the Australian States in 1901, the manufactures of New South Wales were primarily goods for local use, consisting chiefly of food commodities, furniture, bricks, clothing made from imported materials, printing, the repair rather than the manufacture of machinery, and the preliminary treatment of primary products, such as wool-scouring and sawmilling.

The removal of interstate trade barriers and the operation of a uniform protective tariff fostered steady expansion after federation which accelerated (apart from an initial set-back) during the World War 1914-18 as a result of the demands created thereby, the curtailment of imports, and the rapid growth of spending power within the community. New and more advanced development was set in train, iron and steel works and many subsidiary industries were established, the manufacture of machinery began, and a wide range of high-grade products—textiles, metal manufactures, electrical goods, etc.—was added to the list of commodities made in New South Wales.

The world-wide economic depression of 1929-33 affected factory activity severely, but returning general prosperity and the opportunities opened to local manufacturers by import restrictions, imposed to adjust the national balance of payments during the economic crisis, initiated revival in 1933 and gave renewed stimulus to manufacturing enterprise. As economic conditions improved, the tariff, revenue duties, and primage were reduced, but without materially prejudicing the progress of local manufactures.

When war broke out in September, 1939, Australia became a major source of supply for Empire countries east of Suez, and in meeting these demands, as well as those arising locally because of interruption of oversea importations, existing manufacturing industries expanded, and new enterprises were developed rapidly for the production of all classes of munitions, aircraft, ships, many new kinds of machinery and metal manufactures, scientific equipment, textiles, chemicals, etc. The outbreak of war with Japan, the basing of Allied armed forces in Australia, and Australian responsibilities for supplies in the South-west Pacific Area gave added impetus to these developments, and manufacturing in New South Wales outstripped by far all previous levels. Although the inevitable check resulting from sudden cessation of war production and re-orientation of industry to peacetime activities was experienced, factory activity in 1945-46 remained far above the pre-war level.

### *War-time Organisation of Manufacturing Industries.*

At page 518 of the 1941-42 and 1942-43 edition of the Year Book, an outline was given of the authorities constituted during the war to formulate and apply plans for the curtailment of non-essential production and the expansion of manufactures for war-time requirements. War-time controls included the prohibition of non-essential manufactures, rationalisation of manufacturing processes, control over distribution of products, including packing and labelling, and the protection and compulsory direction of labour. These controls were relaxed progressively after (and, in a few cases, before) hostilities ceased. Freedom of movement of labour was restored fully as regards males from March, 1946, and in respect of females from May, 1946.

*Decentralisation of Manufacturing Industries.*

Following upon a report by the Secondary Industries Commission, the Commonwealth Government called a conference of Federal and State Ministers in August, 1945, to formulate a national policy for the decentralised development of secondary industries. It was agreed that the State Governments should seek to promote decentralisation along the lines appropriate to each, providing necessary services, assistance, and concessions where warranted, to the full extent of State resources. The Commonwealth undertook to collaborate in related matters of federal industrial policies, and, in particular, to publicise opportunities for decentralised development, to assess the practicability of development in regions having disabilities to be offset, to advise as to new enterprises desirable in the interests of national defence, and to provide financial assistance where the costs of a project likely to serve the national interest would be great relative to the State's resources.

Steps taken by the Commonwealth have resulted in private enterprises being established in factories set up in country towns for war-time munitions production. Oversea concerns have been encouraged to undertake manufacturing in Australia and the war-time policy of encouraging textile, clothing, and other manufacturers to establish branch factories in country towns has been continued, largely as a means of solving the problem of labour supply.

*Commonwealth Secondary Industries Commission and Division.*

The Secondary Industries Commission was established in October, 1943, within the Ministry of Post-war Reconstruction to investigate possible and appropriate uses of munitions factories developed during the war, to plan for the rapid and orderly transition of secondary industries from war-time to peace-time activities, and, generally, to seek avenues for promoting greater industrial efficiency and to explore opportunities for new manufacturing enterprises. The Commission has the assistance and advice of the Tariff Board and maintains close liaison with the Rural Reconstruction Commission, the Department of Works and Housing, the National Works Council, and other relevant authorities. It works in close association with private industry by means of industry advisory panels set up as occasion requires.

The Secondary Industries Division was created in February, 1945, and is the administrative agency of the Commission. Initially its functions were primarily of war-time significance, but in June, 1946, Federal Cabinet approved that the Division should supervise decentralisation and regional development, encourage new industries and expansion of existing industries, allocate government war-time factories and annexes, discuss with taxation authorities the incidence of taxation on secondary industries, extend research and technical facilities and assist in the solution of production, technical and management problems, initiate and encourage technological research, devise and supervise measures and activities for raising and maintaining the quality of products and increasing industrial efficiency, study distribution and handling problems to reduce costs, and develop local resources of raw materials.

The Secondary Industries Commission recommended that, as the Government's war-time factories in country towns ceased to be required for munitions production, they be converted to peace-time use by sale or lease to private enterprise. By June, 1947, 187 leases and 11 outright sales



(about half being in New South Wales) had been negotiated with Australian, British, Canadian, and United States companies, which have undertaken the production of engineering and electrical equipment, textiles, chemicals, and a wide range of other products.

The establishment and extension of industrial enterprises has been facilitated by freeing new capital issues of up to £25,000 in two years from requirement of the Commonwealth Treasurer's consent and by the opening in January, 1946 of an Industrial Finance Department of the Commonwealth Bank. (See chapter "Private Finance" of this Year Book.)

*State Secondary Industries Division.*

In July, 1946, a Division of Secondary Industries was established within the State Department of Labour and Industry and Social Welfare to pursue the policy of encouraging industrial expansion and decentralisation.

The Division advises the Government in relation to the promotion of and prospects for industrial development and collaborates to that end with other authorities, both State and Federal. Present and prospective manufacturers may refer to the Division for general and technical information covering new industrial materials, processes and opportunities, the availability of factory premises and sites and suitable decentralised locations for new enterprises, and as to local and overseas sources of materials and equipment. It also arranges assistance in technical research, laboratory services, production efficiency examinations, and in establishing costing systems, and upon request will investigate the causes of loss of markets through overseas competition. Advice as to the direct assistance the Government may afford is given by the Division and in appropriate cases it negotiates for rail freight concessions, for permits to build, for the provision of housing for workers, for technical training facilities, and for the necessary water, power and transport services.

*Customs Tariffs and Bounties on Manufactured Products.*

Particulars relating to the Australian tariff, including the provision thereby of protection to Australian manufacturers, and the constitution and functions of the Australian Tariff Board in relation to matters affecting the industrial development of Australia are given in the chapter "Over-sea Trade" of this volume.

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards.

Commodities manufactured in New South Wales in respect of which bounty might be claimed in June, 1947 and the current rates of bounty were as follows:—

Wire netting manufactured from Australian materials: 9s. 7d. per ton. No bounty has been paid since 1939-40 because the net rate of profit on manufacture has exceeded the prescribed limit for bounty.

Tractors manufactured from Australian materials and parts: £32 to £72 per tractor according to the brake power of the engine.

Sulphur produced from Australian materials: 27s. per ton plus or less 1s. per ton for each shilling by which the cost of imported crude brimstone is less than or exceeds £6 per ton, with a maximum rate of bounty of 36s. per ton. No bounty has been paid since 1940 owing to the high cost of imported sulphur and brimstone.

Bounties were paid for motor radiator assemblies for use as original equipment of motor vehicles in 1939-40 and 1940-41, on rubber-insulated cable and wire produced during 1942-43, and on superphosphate produced in Australia in 1941-42 and 1942-43. The last-mentioned bounty was replaced by a subsidy payment to manufacturers based upon the increase in cost of manufacture under the Primary Producers Assistance (Superphosphate) Act, 1943. Particulars of superphosphate subsidy payments and of bounty paid on the export of wine are shown in the chapter "Agriculture" of this Year Book (see pages 439 and 476, respectively).

The amount of bounty paid to manufacturers in New South Wales in respect of the various commodities during the years ended June, 1936 to 1946 is shown in the appended table:—

TABLE 550.—Bounties on Manufactures, Payments in New South Wales, 1935-36 to 1945-46.

Year.	Wire Netting.	Tractors.	Motor Radiator Assembly.	Sulphur.	Rubber Insu- lated Cable and Wire.	Super- Phosphate.
	£	£	£	£	£	£
1935-36 ... ..	9,913	6,578	...	12,717	...	...
1936-37 ... ..	7,790	11,089	...	11,071	...	...
1937-38 ... ..	6,271	13,620	...	9,572	...	...
1938-39 ... ..	5,444	11,223	...	18,125	...	...
1939-40 ... ..	4,081	8,497	1,850	15,249	...	...
1940-41 ... ..	...	6,420	675	...	...	...
1941-42 ... ..	...	667	...	...	...	103,939
1942-43 ... ..	...	850	...	...	3,502	6,253
1943-44 ... ..	...	4,246	...	...	...	...
1944-45 ... ..	...	13,094	...	...	...	...
1945-46 ... ..	...	10,030	...	...	...	...

#### SCIENTIFIC RESEARCH AND STANDARDISATION.

##### *The Council for Scientific and Industrial Research.*

Following a conference in January, 1916 of Commonwealth and State authorities and representatives of the Universities, Chambers of Manufactures and Commerce, and mining and other industries, a Commonwealth Institute of Science and Industry was established to conduct scientific and industrial research. The Institute received permanent status in terms of the Institute of Science and Industry Act, 1920, and was reorganised under the title of the Council for Scientific and Industrial Research by an amending Act of June, 1926.

The Council consists of a chairman and four other members nominated by the Commonwealth Government (these form the Executive Committee of the Council), the chairmen of the six State Committees (these Committees have advisory functions in relation to the Council's business and matters for investigation), and other members (twelve in 1946) co-opted by the Council by reason of their scientific knowledge. It is the function of the Council to initiate and conduct research in connection with industries in Australia, to train research workers, to establish industrial research

studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardisation of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research.

The Council directed its attention almost exclusively to the problems of the primary industries until 1937, when its researches were extended into the field of secondary industries. During the war, the Council devoted its resources to studies directly related to the war effort.

The activities of the Council and the results of its researches are described in its annual reports. An idea of the current field of research may be gained from the following list of divisions (with the location of their headquarters in parentheses) through which the investigational work is conducted: the National Standards Laboratory (Sydney University), comprising the Divisions of Metrology, Electro-technology, and Physics, Plant Industry (Canberra), Economic Entomology (Canberra), Animal Health and Production (Melbourne), Bio-chemistry and General Nutrition (Adelaide University), Soils (Waite Agricultural Research Institute, Adelaide), Forest Products (Melbourne), Food Preservation and Transport (Homebush, New South Wales), Fisheries (Cronulla, New South Wales), Aeronautics (Melbourne), Industrial Chemistry (Melbourne), Radiophysics (Sydney University), Irrigation Settlement Research (Griffith, New South Wales, and Merbein, Victoria), Tribophysics (Melbourne University), Building Materials Research and Flax Research (both at Highett, Victoria), Radio Research (Sydney University), and Dairy Products, Ore-dressing, Rubber, Mineragraphic, and Oenological Investigations, and the Section of Mathematical Statistics (Adelaide University). The Council also maintains a Central Library, an Information Service to provide scientific and technical information, and Scientific Liaison Offices in London and Washington.

The funds of the Council are provided mainly from Commonwealth funds by Parliamentary appropriation and from industry by way of donations and special grants. In 1945-46, expenditure by the Council for salaries, investigations, and general expenses amounted to £1,075,137, of which £89,774 was provided by contributions and donations other than directly by the Commonwealth Government.

The Science and Industry Endowment Act, 1926 appropriated £100,000 to a trust fund vested in the Executive Committee of the Council for Scientific and Industrial Research as trustees. The income derived from the fund was to be used in the training of students and in assisting persons engaged in scientific research. During 1945-46, income amounted to £4,348 (all interest) and expenditure comprised £561 for research grants and £1,463 for training of research students; at 30th June, 1946 the Fund amounted to £121,857.

#### *The Standards Association of Australia.*

The Association was established in 1929 by the amalgamation of the Australian Commonwealth Engineering Standards Association (founded 1922) and the Australian Commonwealth Association of Simplified

Practice (founded 1927). Its affairs are governed by a council which comprises representatives of the Commonwealth and State Governments, scientific and professional organisations, and private industry. The Association receives financial support from private industry and from the Commonwealth through the Council for Scientific and Industrial Research.

The Standards Association acts as the national standardising organisation of Australia and issues standard specifications for materials and codes of practice. The Association's specifications and codes are prepared and revised periodically in accordance with the needs of industry and its standards are evolved and accepted by general consent.

#### *The National Association of Testing Authorities.*

The formation of a National Association of Testing Authorities was approved by the Commonwealth Government with the assent of State Governments in August, 1946. The Association (not yet active) is to organise national testing facilities throughout Australia to serve private and governmental needs. Laboratories will register voluntarily in respect of tests within their competence and the Association will ensure the maintenance of their standards of testing. It is expected that there will be general acceptance of certificates of tests issued in the name of the Association by the registered laboratories.

#### *The State Technological Museum.*

The staff of the State Technological Museum also assists in the promotion of industrial efficiency and expansion by undertaking research and disseminating scientific and technical information.

#### *Patents, Trade Marks, Etc.*

Details concerning patents, trade marks, designs, etc. are given in the chapter "Social Condition" of this Year Book.

#### DEFINITIONS IN FACTORY STATISTICS.

The statistics relating to factories, as shown in this chapter, have been compiled from returns supplied annually by manufacturers in terms of the Census Act of 1901. A return must be supplied in respect of every factory, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries), but does not cover smallgoods makers, laundries, farrieries, photography studios, florists and seedsmen, and abattoirs.

If a manufacturing business is conducted in conjunction with an importing or a retail business, particulars relating to the manufacturing section only are included in the statistics. Where two or more industries are conducted in the same establishment, a separate return is obtained for each industry. This rule has not applied to the generation of electricity in and solely for the use of a factory since 1936-37, when the practice of requiring separate returns covering electricity plant and other factory operations was discontinued. The cost of generating power is distributed proportionately amongst the industries conducted in the factory.

Manufacturers are requested to state in their returns particulars as to the number, age, wages, etc. of their employees, the value of premises and equipment, the horse-power of machinery, the value, and in most cases the quantities of raw materials and fuel used, and quantities and values of principal materials and articles produced. The returns obtained from manufacturers relate to a comprehensive range of items, but are not intended to be a complete record of the income or expenditure of factories nor to show the profits or losses of factories collectively or individually.

The *average number of factory employees* is quoted in this chapter on two different bases: the average during the period of operation and the average over the whole year. Of these, the former is simply the aggregate of the average number of persons employed in each factory during its period of operation (whether the whole or only part of the year). The latter, which is used where available, is calculated by reducing the average number of employees working in the factories (irrespective of period of operation) to the equivalent number working for a full year.

The *value of factory output* is the value of the goods manufactured or their value after passing through the particular process of manufacture, and may be regarded as the sum of the value of the raw materials used and the value added to these materials by the process of manufacture. The basis of valuation of the output is the wholesale selling value of the goods at the factory, exclusive of delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer.

The *value of production* is the value added to raw materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of the raw materials used, containers and packing, power, fuel, and light used, tools replaced, and materials used in repairs to plant (but not depreciation charges).

In the process of manufacture, many goods are treated in several industries, the output of one becoming the raw materials of another, so that such commodities are counted more than once in the aggregate value of output and of raw materials. Examples are raw sugar passing from the mills to the refinery, metals from the smelters which become raw materials in establishments concerned in the production of metal goods, and timber from the sawmills used in furniture factories and in joinery. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason the value of production, and not the value of the output, is used as a measure of activity in the manufacturing industries as a whole.

In the special case of Government factories and workshops, the value of output is estimated by adding 10 per cent. to the value of materials and fuel used and other factory costs.

Where there is a separate department for selling the products, the value of the output as recorded in the returns furnished by the manufacturers is the nominal value at which the goods are transferred from the factory to the sales branch. The extent to which the recorded value of the output and the value of production are affected is not measurable, but is known

to be appreciable in some industries. Being a constant practice, comparisons from year to year are not affected greatly, but it has a bearing in analysing statistics of the manufacturing industries, for example, in calculating the proportion of the output which is represented by cost of raw materials or by wages.

### CLASSIFICATION OF FACTORIES.

In the compilation of statistical data relating to factories in New South Wales, a standard classification of manufacturing industries, formulated at a conference of Australian statisticians in 1902 and revised from time to time, was used until the year 1929-30. A new classification was introduced in 1930-31, and this, in turn, was revised and extended in accordance with decisions of the Statisticians' Conference, 1945. Factory statistics for 1945-46 were compiled on this revised basis and for the greater part may be compared with those for the years since 1930-31.

The principal classes and sub-classes in the current classification of factories are as follows:—

#### CLASS I.—TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS.

Coke Works.  
Briquetting and Pulverised Coal.  
Carbide.  
Lime, Plaster of Paris, Asphalt.  
Fibrous Plaster and Products.  
Marble, Slate, etc.  
Cement.  
Cement Goods.  
Other.

#### CLASS II.—BRICKS, POTTERY, GLASS, ETC.

Bricks and Tiles, Fire Bricks and Fire-clay Goods.  
Earthenware, China, Porcelain, Terra-cotta.  
Glass (other than Bottles).  
Glass Bottles.  
Other.

#### CLASS III.—CHEMICALS, DYES, EXPLOSIVES, PAINT, OILS, GREASE.

Industrial and Heavy Chemicals and Aoids.  
Pharmaceutical and Toilet Preparations.  
Explosives.  
White Lead, Paints, Varnish.  
Oils, Vegetable.  
Oils, Mineral.  
Oils, Animal.  
Boiling Down, Tallow Refining.  
Soap and Candles.  
Chemical Fertilisers.  
Inks, Polishes, etc.  
Matches.  
Other.

#### CLASS IV.—INDUSTRIAL METALS, MACHINES, IMPLEMENTS AND CONVEYANCES.

Smelting, Converting, Refining, and Rolling of Iron and Steel.  
Foundries—Ferrous.  
Plant, Equipment and Machinery.  
Other Engineering.  
Extracting and Refining of other Metals, Alloys.

Electrical Machinery, Cables and Apparatus.  
Construction and Repair of Vehicles.  
Ship and Boat Building and Repairing, Marine Engineering.  
Cutlery and Small Hand Tools.  
Agricultural Machines and Implements.  
Non-Ferrous Metals—Rolling and Extrusion Foundries, Casting, etc.  
Galvanised Iron-working and Tinsmithing—Iron and Steel Sheets.  
Sheet Metal Working, Pressing, and Stamping.  
Pipes, Tubes and Fittings Ferrous.  
Wire and Wire Netting (including Nails).  
Stoves, Ovens, and Ranges.  
Gas Fittings and Meters.  
Lead Mills.  
Sewing Machines.  
Arms, Ammunition (excluding Explosives).  
Wireless and Amplifying Apparatus.  
Other Metal Works.

#### CLASS V.—PRECIOUS METALS, JEWELLERY, PLATE.

Jewellery.  
Watches and Clocks (incl. Repairs).  
Electroplating (Gold, Silver, Chromium, etc.).

#### CLASS VI.—TEXTILES AND TEXTILE GOODS (NOT DRESS).

Cotton Ginning.  
Cotton Spinning and Weaving.  
Wool—Carding, Spinning, Weaving.  
Hosiery and other Knitted Goods.  
Silk, Natural.  
Rayon, Nylon, and other Synthetic Fibres.  
Flax Mills.  
Rope and Cordage.  
Canvas Goods, Tents, Tarpaulins, etc.  
Bags and Sacks.  
Other.

CLASS VII.—SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR).

Furriers and Fur Dressing.  
Woolscouring and Feltmongery.  
Tanning, Currying and Leather Dressing.  
Saddlery, Harness, Whips.  
Machine Belting.  
Bags, Trunks, etc.  
Other.

CLASS VIII.—CLOTHING (EXCEPT KNITTED).

Tailoring and Ready Made Clothing.  
Waterproof and Oilskin Clothing.  
Dressmaking, Hemstitching.  
Millinery.  
Shirts, Collars, Underclothing.  
Stays and Corsets.  
Handkerchiefs, Ties, Scarves.  
Hats and Caps.  
Gloves.  
Boots and Shoes (not rubber).  
Boot and Shoe Repairing.  
Boot and Shoe Accessories.  
Umbrellas and Walking Sticks.  
Dyeworks and Cleaning (including Renovating and Repairing).  
Other.

CLASS IX.—FOOD, DRINK, AND TOBACCO.

Flour Milling.  
Cereal Foods and Starch.  
Animal and Bird Foods.  
Chaffcutting and Corn Crushing.  
Bakeries (including Cakes and Pastry).  
Biscuits.  
Sugar Mills.  
Sugar Refining.  
Sugar Confectionery (including Chocolate).  
Jam, Fruit, and Vegetable Canning.  
Pickles, Sauces, Vinegar.  
Bacon Curing.  
Butter Factories.  
Cheese Factories.  
Condensed and Dried Milk Factories.  
Margarine.  
Meat and Fish Preserving.  
Condiments, Coffee, Spices, etc.  
Ice and Refrigerating.  
Salt Refining.  
Aerated Waters, Cordials, etc.  
Breweries.  
Distilleries.  
Wine Making.  
Cider and Perry Making.  
Malting.  
Bottling.  
Tobacco, Cigars, Cigarettes, Snuff.  
Dehydrated Fruit and Vegetables.  
Ice-cream.  
Sausage Skins.  
Arrowroot.  
Other.

CLASS X.—WOOD WORKING AND BASKETWARE.

Sawmills.  
Plywood Mills (incl. Veneers).  
Bark Mills.  
Joinery.  
Cooperage.  
Boxes and Cases.  
Wood Turning, Wood Carving, etc.  
Basketware and Wickerware, including Seagrass and Bamboo Furniture.  
Perambulators.  
Wall and Ceiling Boards (not Plaster or Cement).  
Other.

CLASS XI.—FURNITURE, BEDDING, ETC.

Billiard Tables, Cabinet and Furniture Making and Upholstery.  
Bedding and Mattresses (not wire).  
Furnishing Drapery, etc.  
Picture Frames.  
Blinds.  
Other.

CLASS XII.—PAPER, STATIONERY, PRINTING, BOOKBINDING, ETC.

Newspapers and Periodicals.  
Printing—Government.  
Printing, General, incl. Bookbinding.  
Manufactured Stationery.  
Stereotyping and Electrotyping.  
Process and Photo. Engraving.  
Cardboard Boxes, Cartons, and Containers.  
Paper Bags.  
Paper Making.  
Pencils, Penholders, Chalks, Crayons.  
Other.

CLASS XIII.—RUBBER.

Rubber Goods and Tyres Made.  
Tyre Retreading and Repairing.

CLASS XIV.—MUSICAL INSTRUMENTS.

Gramophones and Gramophone Records.  
Pianos, Piano-Players, Organs.  
Other.

CLASS XV.—MISCELLANEOUS PRODUCTS.

Linoleum, Leather Cloth, Oil Cloth, etc.  
Bone, Horn, Ivory, and Shell.  
Plastic Moulding and Products.  
Brooms and Brushes.  
Optical Instruments and Appliances.  
Surgical and other Scientific Instruments and Appliances.  
Photographic Material, including Developing and Printing.  
Toys, Games, and Sports Requisites.  
Artificial Flowers.  
Other.

CLASS XVI.—HEAT, LIGHT, AND POWER.

Electric Light and Power.  
Gas Works.

## FACTORY DEVELOPMENT SINCE 1901.

The following summary of certain principal items from statistical returns indicates the development of factories in New South Wales since 1901:—

TABLE 551.—Factories in New South Wales, 1901 to 1945-46.

Year.	Establishments.	Number Employed.*	Total Horse-power of Engines Installed.	Value of Land, Buildings and Plant.	Salaries and Wages.†	Value of Materials and Fuel used.	Value of Output.	Value of Production.
	No.	No.	h.p.	£000	£000	£000	£000	£000
1901 ...	3,367	61,764†	57,335	13,699	4,945	15,637	25,648	10,011
1911 ...	5,039	104,551†	212,555	25,651	10,048	34,914	54,346	19,432
1920-21 ...	5,837	130,211	491,576	59,544	25,619	94,713	137,841	43,128
1928-29 ...	8,465	180,756	1,028,212	102,741	38,545	111,671	185,298	73,627
1930-31 ...	7,544	127,605	1,328,864	100,688	25,200	68,960	118,484	49,524
1931-32 ...	7,397	126,355	1,382,682	96,741	22,751	67,783	114,439	46,653
1935-36 ...	8,486	193,200	1,505,247	101,459	33,315	105,224	174,694	69,470
1936-37 ...	8,726	208,497	1,578,949	103,609	36,642	116,058	192,812	76,754
1937-38 ...	9,097	224,861	1,692,993	111,694	42,210	129,715	214,883	85,168
1938-39 ...	9,464	228,781	1,791,814	120,047	44,606	128,153	218,419	90,266
1939-40 ...	9,458	236,974	1,929,824	123,741	47,693	142,589	239,198	96,609
1940-41 ...	9,919	265,751	2,052,821	130,420	57,760	170,873	285,917	115,044
1941-42 ...	10,166	298,245	2,104,937	135,627	75,758	200,698	339,488	138,790
1942-43 ...	10,110	315,534	2,213,490	145,745	88,900	219,907	373,489	153,582
1943-44 ...	10,755	323,032	2,267,112	152,782	93,518	236,412	399,138	162,726
1944-45 ...	11,359	314,678	2,301,635	154,098	89,243	227,784	387,659	159,875
1945-46 ...	12,287	310,870	2,349,111	152,869	87,647	215,913	367,092	153,179
Average per factory.				Average per employee.				
	No.	h.p.	£	£	£	£	£	£
1901 ...	18.3	17.0	4,089	80	253	415	162	
1911 ...	20.7	42.2	5,090	100	334	520	186	
1920-21 ...	23.8	84.2	10,201	190	680	990	310	
1928-29 ...	21.4	121.5	12,137	221	618	1,025	407	
1930-31 ...	16.9	176.2	13,347	207	540	928	388	
1931-32 ...	17.1	186.9	12,778	189	537	906	369	
1935-36 ...	22.8	177.4	11,956	179	545	904	359	
1936-37 ...	23.9	181.0	11,874	182	557	925	363	
1937-38 ...	24.7	186.1	12,278	194	577	956	379	
1938-39 ...	24.2	189.3	12,685	202	560	955	395	
1939-40 ...	25.0	204.0	13,083	208	602	1,009	407	
1940-41 ...	26.8	207.0	13,148	224	643	1,076	433	
1941-42 ...	29.3	207.0	13,341	261	673	1,138	465	
1942-43 ...	31.2	219.0	14,416	289	697	1,184	487	
1943-44 ...	30.0	210.8	14,204	297	732	1,236	504	
1944-45 ...	27.7	202.6	13,566	292	724	1,232	508	
1945-46 ...	25.3	191.2	12,441	291	710	1,218	508	

\* Average number during whole year, including working proprietors.

† Estimated.

‡ Excluding drawings by working proprietors.

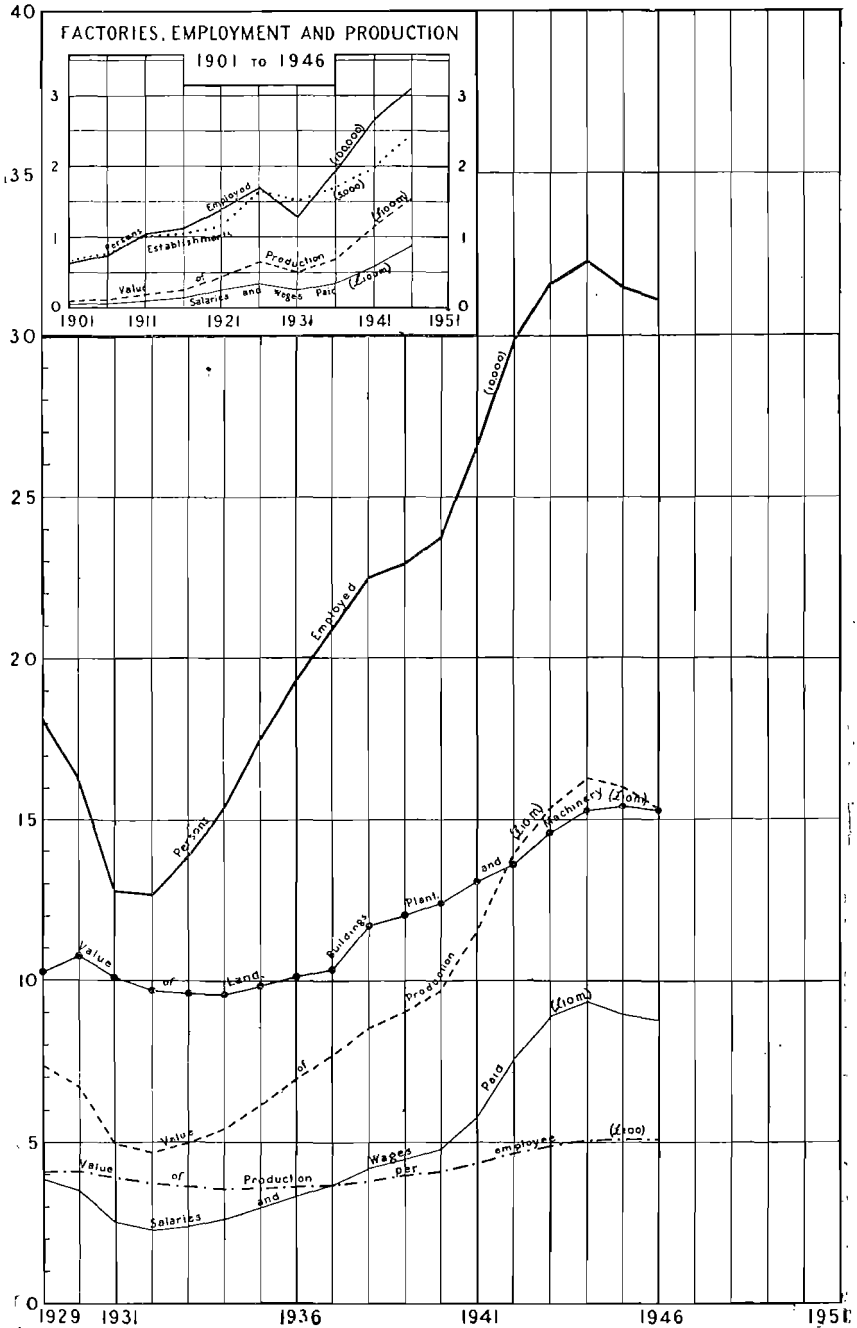
Manufacturing industries expanded almost continuously from 1901 until 1928-29 but the depression caused a marked decrease in factory activity in each of the next three years. Sustained revival was initiated in 1932-33 under the stimuli of import restrictions imposed during the crisis and gradual economic recovery. The pre-depression level was surpassed by 1935-36 and in 1938-39 there were 999 more factories than in 1928-29, the number of employees was 48,025 (27 per cent.) greater, salaries and wages paid had increased by £6,061,000 (16 per cent.), and the value of production was £16,639,000 (23 per cent.) greater.

Further rapid expansion followed upon the outbreak of war in September, 1939, marked by the extension of existing and establishment of new industries to provide war supplies, equipment, and commodities previously imported from overseas. The entry of Japan into the war in 1941 accelerated industrial development. Between 1938-39 and 1943-44 (the war-time peak year), the number of factory workers increased by 41 per cent. to 323,032, the total amount of salaries and wages paid rose by 110 per cent.



to £93,518,000 and the average earnings per employee by 47 per cent. to £297 per annum, and the value of production grew from £90,266,000 to £162,726,000 (an increase of 80. per cent.).

MANUFACTURING INDUSTRY, NEW SOUTH WALES, 1901 to 1946.



Notwithstanding the cessation of war production and the difficulties connected with the conversion of industry to a peace-time basis, factory activity in 1945-46 remained far above the pre-war level. Compared with 1943-44 there were decreases only of 4 per cent. in the number of employees and 6 per cent. in salaries and wages paid and in the value of production, and the number of establishments was 11 per cent. greater.

#### GOVERNMENT FACTORIES AND WORKSHOPS.

The foregoing statement includes particulars of factories and workshops under Government control in New South Wales. These include aircraft and munitions factories, railway and tramway workshops, post office workshops, electric light and power works, printing works, manufacture of by-products at abattoirs, dockyards, and factories for the production of clothing and school furniture. In Government factories not engaged in production of war supplies, repair work formed a large proportion of the work done.

Gas works and electricity undertakings of the local governing bodies are classified as private and not Government establishments.

The following table shows the details of the operations of the establishments under the control of the State and Commonwealth Governments separately from those conducted by private enterprise:—

TABLE 552.—Government and Private Factories, 1935-36 to 1945-46.

Year ended 30th June.	Establishments. *	Average Number of Employees during Period of Operation.		Salaries and Wages Paid. †		Value of Land, Buildings and Fixtures.	Value of Plant and Machinery.	Value of Materials and Fuel Used.	Value of Output. ‡	Value of Production. ‡
		Males.	Females.	Males.	Females.					
	No.	No.	No.	£000	£000	£000	£000	£000	£000	£000
<i>Government Factories.</i>										
1936 ...	69	14,574	388	3,219	42	5,568	6,551	3,094	7,659	4,565
1937 ...	70	14,810	394	3,393	43	5,547	6,640	3,102	8,006	4,904
1938 ...	71	15,159	478	3,715	54	5,618	6,785	3,379	8,571	5,195
1939 ...	72	15,764	442	4,045	53	5,736	7,512	3,648	9,266	5,618
1940 ...	72	16,757	469	4,471	58	5,757	7,951	3,897	10,207	6,310
1941 ...	78	20,683	547	5,926	73	5,978	8,647	4,616	12,734	8,118
1942 ...	118	27,263	1,148	9,062	182	6,745	9,437	6,502	18,586	12,084
1943 ...	141	32,173	6,078	12,000	1,288	12,784	12,232	11,588	28,305	16,717
1944 ...	146	32,335	8,330	12,216	1,818	16,322	13,464	12,148	29,414	17,266
1945 ...	135	29,415	4,574	10,837	1,029	16,075	14,303	9,358	24,231	14,873
1946 ...	101	27,205	1,957	9,123	371	12,043	12,411	8,689	21,189	12,500
<i>Private Factories.</i>										
1936 ...	8,417	129,506	52,666	25,357	4,696	43,926	45,414	102,130	167,035	64,905
1937 ...	8,656	137,254	56,039	28,058	5,149	46,082	45,339	112,957	184,806	71,849
1938 ...	9,026	149,232	59,992	32,532	5,908	48,854	50,438	126,336	206,309	79,973
1939 ...	9,392	153,749	61,845	34,226	6,282	51,618	55,181	124,505	209,153	84,648
1940 ...	9,886	157,420	64,706	36,337	6,827	53,183	56,850	138,692	223,991	90,299
1941 ...	9,841	175,262	71,888	43,614	8,147	55,909	59,886	166,256	273,182	106,926
1942 ...	10,048	192,750	80,959	55,788	10,725	58,270	61,175	194,196	320,902	126,706
1943 ...	9,969	193,682	86,384	62,555	13,057	59,839	60,890	208,319	345,184	136,865
1944 ...	10,600	196,510	88,981	64,871	14,613	62,655	60,340	224,264	369,724	145,460
1945 ...	11,224	196,057	87,141	63,098	14,279	64,984	58,736	218,426	363,428	145,002
1946 ...	12,186	203,809	82,803	64,257	13,896	68,265	60,150	205,224	345,903	140,679

\* Each Government Railway Workshop is counted as a separate establishment.

† Excluding drawings of working proprietors. ‡ For the basis of estimation, see page 607.

Government factories expanded rapidly during the war years up to 1943-44. In 1943-44, employees numbered 40,665, salaries and wages paid amounted to £14,034,000, and the value of production was £17,266,000, representing increases of 151 per cent., 242 per cent., and 207 per cent. respectively, over the pre-war (1938-39) level. Production of munitions and other war supplies was the main source of the development and although it was curtailed progressively after that year, Government factory activity remained materially greater in 1945-46 than in 1938-39. In 1945-46, there

were 29,162 employees in Government factories (80 per cent. more than in 1938-39), salaries and wages amounted to £9,494,000 (an increase of 132 per cent.), and the value of production was £12,500,000 (an increase of 122 per cent.).

War-time expansion was proportionately greater in Government than in privately-owned factories. In 1938-39, 7.0 per cent. and in 1943-44, 12.5 per cent. of all factory employees were on the payrolls of Government factories, and these employees received, in the respective years, 9.2 per cent. and 15 per cent. of total salaries and wages paid. Government factories contributed 6.2 per cent. of the total value of production in 1938-39 and 10.6 per cent. in 1943-44 and 1945-46.

A comment on the conversion of Government war-time factories to peace-time uses is given on page 602 of this volume.

FACTORIES ACCORDING TO CLASS OF INDUSTRY.

In the following table statistics of factories in New South Wales during the years ended June, 1945 and 1946 are summarised according to the class of industry.

TABLE 553.—Factories—Classes of Industry, 1944-45 and 1945-46.

Class of Industry.	Establishments.	Average Number Employed.*			Salaries and Wages exclusive of Drawings of Working Proprietors.	Value of Materials and Fuel Used.	Value of Output.	Value of Production.
		Males.	Females.	Total.				
					£000	£000	£000	£000
1944-45—New South Wales.								
Treatment of Non-metalliferous Mine and Quarry Products ... ..	155	3,390	166	3,556	1,190	3,898	6,207	2,309
Bricks, Pottery, Glass ... ..	146	5,565	647	6,212	1,782	2,023	4,704	2,681
Chemicals, Paint, Oil, Grease ... ..	429	8,301	3,928	12,229	3,530	15,623	25,950	10,327
Industrial Metals, Machines, Conveyances ... ..	3,296	127,922	23,154	151,076	48,404	92,038	164,697	72,059
Precious Metals, Jewellery ... ..	91	653	240	893	221	248	649	401
Textiles and Textile Goods (not dress)	277	7,001	12,425	19,426	4,273	12,218	20,044	7,826
Skins, Leather (not clothing or footwear) ... ..	276	4,075	1,779	5,854	1,635	4,715	7,348	2,633
Clothing ... ..	2,095	8,774	25,894	34,668	6,494	12,481	23,482	11,001
Food, Drink, Tobacco ... ..	1,989	22,387	11,765	34,152	9,050	54,541	77,203	22,062
Woodworking, Basketware ... ..	1,101	12,150	752	12,902	3,476	8,309	13,962	5,653
Furniture, Bedding ... ..	310	3,173	837	4,010	1,097	2,142	3,977	1,835
Paper, Printing ... ..	672	10,004	5,830	15,834	4,333	8,959	17,579	8,920
Rubber ... ..	104	2,868	946	3,814	1,180	3,653	5,097	1,444
Musical Instruments ... ..	16	184	96	280	81	63	199	156
Miscellaneous Products ... ..	310	3,606	2,389	5,995	1,436	2,029	4,404	2,375
Heat, Light, Power ... ..	142	3,717	60	3,777	1,425	4,844	12,157	7,313
Total ... ..	11,359	223,770	90,908	314,678	89,243	227,784	387,859	159,875
1945-46—Metropolis.								
Treatment of Non-metalliferous Mine and Quarry Products ... ..	114	2,006	100	2,106	614	1,127	2,083	956
Bricks, Pottery, Glass ... ..	106	5,455	488	5,943	1,784	1,893	4,547	2,654
Chemicals, Paint, Oil, Grease ... ..	403	7,626	4,016	11,642	3,439	15,160	25,918	10,758
Industrial Metals, Machines, Conveyances ... ..	2,302	90,513	12,584	103,097	31,709	38,587	82,688	44,151
Precious Metals, Jewellery ... ..	117	871	208	1,079	278	348	806	458
Textiles and Textile Goods (not dress)	252	6,216	9,004	15,220	3,615	9,569	15,808	6,239
Skins, Leather (not clothing or footwear) ... ..	270	4,023	1,953	5,976	1,635	4,659	7,329	2,670
Clothing ... ..	1,778	8,803	23,888	32,691	6,606	11,279	22,066	10,787
Food, Drink, Tobacco ... ..	916	15,267	9,321	24,588	6,815	36,001	52,900	16,899
Woodworking, Basketware ... ..	426	6,210	456	6,666	1,939	5,129	8,143	3,014
Furniture, Bedding ... ..	317	3,629	965	4,594	1,291	2,457	4,486	2,029
Paper, Printing ... ..	609	10,399	5,010	15,409	4,479	8,665	16,484	7,819
Rubber ... ..	53	2,909	778	3,687	1,191	3,753	5,196	1,443
Musical Instruments ... ..	16	216	95	311	89	70	215	145
Miscellaneous Products ... ..	304	3,879	2,398	6,277	1,548	2,356	5,075	2,719
Heat, Light, Power ... ..	9	2,441	30	2,471	889	3,522	8,973	5,451
Total ... ..	7,892	170,463	71,294	241,757	67,911	144,525	262,717	118,192

\* Average during whole year, including working proprietors.

TABLE 553—Factories—Classes of Industry—*continued*.

Class of Industry.	Establishments.	Average Number Employed.*			Salaries and Wages exclusive of Drawings of Working Proprietors.	Value of Materials and Fuel Used.	Value of Output.	Value of Production.
		Males.	Females.	Total.				
1945-46— <i>New South Wales.</i>					£600	£000	£000	£000
Treatment of Non-metalliferous Mine and Quarry Products ... ..	225	4,209	167	4,376	1,364	3,953	6,353	2,400
Bricks, Pottery, Glass ... ..	194	6,901	565	7,466	2,213	2,264	5,574	3,310
Chemicals, Paint, Oil, Grease ... ..	445	9,059	4,105	13,164	3,969	16,646	28,025	11,370
Industrial Metals, Machines, Conveyances ... ..	3,530	121,060	15,542	136,602	42,478	77,319	139,890	62,571
Precious Metals, Jewellery ... ..	126	899	211	1,110	281	352	817	465
Textiles and Textile Goods (not dress) ... ..	290	7,610	10,731	18,341	4,263	11,199	18,008	7,409
Skins, Leather (not clothing or footwear) ... ..	307	4,368	2,017	6,385	1,734	4,983	7,820	2,846
Clothing ... ..	2,287	9,964	27,687	37,651	7,316	12,425	24,475	12,050
Food, Drink, Tobacco ... ..	2,037	23,637	11,837	35,474	9,736	53,493	76,033	22,540
Woodworking, Basketware ... ..	1,188	12,746	753	13,499	3,586	8,260	14,025	5,765
Furniture, Bedding ... ..	370	3,916	1,071	4,987	1,375	2,586	4,761	2,175
Paper, Printing ... ..	686	11,613	5,346	16,959	4,886	8,996	17,466	8,470
Rubber ... ..	118	3,180	810	3,990	1,255	3,906	5,492	1,586
Musical Instruments ... ..	16	216	95	311	89	70	215	145
Miscellaneous Products ... ..	329	3,981	2,426	6,407	1,579	2,408	5,175	2,767
Heat, Light, Power ... ..	139	4,095	53	4,148	1,523	5,053	12,354	7,301
Total ... ..	12,287	227,454	83,416	310,870	87,647	213,913	367,092	153,179

\* Average during whole year, including working proprietors.

Factories engaged in the production of industrial metals, machines, etc. comprise the most important group of secondary industries in New South Wales. In 1945-46, these factories employed 163,602 persons, or 44 per cent. of the total number working in factories. Textile and clothing factories rank next in importance and employed 55,992 (18 per cent. of factory workers). There were 35,474 persons (11 per cent. of those in factories) occupied in the food, drink, and tobacco class, 13,164 (4 per cent. of employees) in the manufacture of chemicals, paints, etc., and 4,148 (1 per cent.) in the provision of heat, light, and power.

Between 1938-39 and 1945-46, the average number working in factories increased 82,092, or by 36 per cent. Metal and machinery works accounted for nearly three-quarters of this increase, and employment in them rose by 66 per cent. during the period. Other noteworthy increases were 19 per cent. in textile and clothing factories, 24 per cent. in food, drink and tobacco factories, 31 per cent. in gas and electricity works, and 61 per cent. in factories manufacturing chemicals, paints, etc.

There were significant changes in the relative importance of certain groups of industries (measured by the average number employed) between 1938-39 and 1945-46. In the latter year, metal and machinery works employed 44 per cent. of all persons in factories, compared with 36 per cent. before the war. The proportion of the total in most other groups declined during the period. Textile and clothing factories, for example, embraced 18 per cent. of all persons employed in factories in 1945-46 compared with 21 per cent. in 1938-39, and the proportion in food and drink factories decreased from 12 per cent. to 11 per cent.

Of the total value of production in factories in 1945-46, metal and machinery works contributed 41 per cent., food and drink factories 15 per cent., textile and clothing establishments 13 per cent., and chemical and paint works 7 per cent.

GEOGRAPHICAL DISTRIBUTION OF FACTORIES.

The operations of the factories in each statistical division of New South Wales in the years 1944-45 and 1945-46 are summarised in the following table to provide a measure of the spread of secondary industries over the State:—

TABLE 554.—Factories in Statistical Divisions, 1944-45 and 1945-46.

Division.	No. of Establishments.	Average Number of Employees.*	Value of Land and Buildings and Fixtures.	Value of Plant and Machinery.	Salaries and Wages Paid.	Materials and Fuel Used.	Value of Output.	Value of Production.
			£000	£000	£000	£000	£000	£000
1944-1945.								
Metropolis ... ..	7,304	242,337	56,571	43,270	67,667	152,316	273,749	121,433
Balance of Cumberland ... ..	230	6,963	6,573	2,388	1,808	4,104	6,690	2,586
North Coast ... ..	535	4,956	1,215	1,766	1,162	6,473	8,561	2,088
Hunter and Manning ... ..	903	29,770	5,921	9,455	9,519	32,734	49,102	16,368
South Coast ... ..	458	11,541	2,588	6,732	3,513	16,312	23,657	7,345
Northern Tableland ... ..	171	940	276	219	186	530	888	358
Central Tableland ... ..	388	8,529	2,939	4,538	2,516	3,994	7,672	3,678
Southern Tableland ... ..	136	1,531	363	441	355	605	1,210	605
North-western Slope ... ..	151	978	281	276	223	742	1,155	413
Central-western Slope ... ..	202	1,324	390	269	270	737	1,225	488
South-western Slope ... ..	357	3,530	1,030	857	750	2,444	4,000	1,556
Northern Plain ... ..	92	565	179	249	137	300	547	247
Central Plain ... ..	72	275	63	70	50	74	153	79
Riverina ... ..	239	2,523	2,313	1,237	657	1,937	3,079	1,142
Western Division ... ..	121	1,420	357	1,213	430	4,482	5,971	1,489
Total ... ..	11,359	317,187	81,059	73,039	89,243	227,784	387,659	159,875
1945-1946.								
Metropolis ... ..	7,892	244,309	59,117	44,728	67,911	144,524	262,716	118,192
Balance of Cumberland ... ..	275	6,100	5,475	1,813	1,544	3,338	5,624	2,286
North Coast ... ..	584	6,799	1,456	2,156	1,389	6,920	9,277	2,357
Hunter and Manning—								
Greater Newcastle ... ..	411	21,547	3,855	7,006	7,099	25,819	37,605	11,786
Balance ... ..	545	7,495	1,653	2,049	1,828	4,254	7,501	3,247
South Coast—								
Wollongong-Port Kembla ... ..	171	8,165	1,933	5,875	2,450	11,063	15,620	4,557
Balance ... ..	317	2,394	708	722	560	1,780	2,848	1,068
Northern Tableland ... ..	191	1,073	305	252	217	583	976	393
Central Tableland ... ..	415	6,456	2,463	4,397	1,754	3,469	6,312	2,843
Southern Tableland ... ..	143	1,601	402	446	336	686	1,396	710
North-western Slope ... ..	170	1,189	352	313	272	799	1,312	513
Central-western Slope ... ..	205	1,257	373	250	265	608	1,122	514
South-western Slope ... ..	395	3,934	1,062	683	837	2,715	4,199	1,484
Northern Plain ... ..	101	604	164	142	133	290	520	230
Central Plain ... ..	82	331	84	112	61	92	217	125
Riverina ... ..	274	2,314	617	504	589	1,598	2,547	949
Western Division ... ..	116	1,206	289	1,113	402	5,375	7,300	1,925
Total ... ..	12,287	315,774	80,308	72,561	87,647	213,913	367,092	153,179

\* Average during period of operation (including working proprietors).

The secondary industries of New South Wales are mainly in the metropolitan area, where 64 per cent. of the total number of factories were situated in 1945-46. These factories absorbed 77 per cent. of the total number of factory employees and contributed 77 per cent. of the total value of production. Other important manufacturing centres are in the major coal-fields—at Newcastle in the Hunter and Manning Division, at Wollongong-Port Kembla in the South Coast Division, and at Lithgow in the Central Tablelands Division. Factories in these areas in 1945-46 employed approximately 11 per cent. of total factory workers and accounted for approximately 12 per cent. of the total value of production. At Broken Hill, in the Western Division, the mining of silver-lead-zinc ore deposits has given rise to a number of subsidiary factories, such as ore-treatment plants.

The metropolitan predominance of secondary industries has not been lessened materially since 1938-39, although a number of textile and clothing factories has been transferred to and branch factories have been opened in country districts under the governmental policy of decentralisation and because of the scarcity of labour in the metropolitan area.

The following table shows the factories and employees in each statistical division in 1945-46 grouped according to class of industry:—

TABLE 555.—Factories—Classes in Statistical Divisions, 1945-46.

Division.	Bricks, Pottery, Glass.	Chemicals, Paint, Oil, Grease.	Industrial Metals, Machines, etc.	Textiles.	Skins, Leather.	Clothing.	Food, Drink, etc.	Woodworking.	Furniture, etc.	Paper, Printing.	Heat, Light Power.	Other Classes.	Total.
NUMBER OF ESTABLISHMENTS.													
Cumberland—													
Metropolis ...	106	403	2,302	252	270	1,778	916	426	317	509	9	604	7,892
Balance ...	13	6	63	11	13	43	59	42	...	8	...	17	275
North Coast ...	3	3	134	3	...	50	150	179	8	17	10	27	584
Hunter and Manning—													
Greater													
Newcastle ...	9	8	132	5	2	77	83	33	20	15	4	23	411
Balance ...	9	5	126	2	3	57	147	143	5	21	11	16	545
South Coast—													
Wollongong—													
Pt. Kembla	3	4	50	4	1	38	31	15	2	4	5	14	171
Balance ...	5	2	79	1	2	26	88	79	1	11	11	12	317
Tablelands—													
Northern ...	4	3	59	...	2	17	50	32	1	6	9	8	191
Central ...	14	2	97	3	3	55	119	60	4	15	16	27	415
Southern ...	2	1	47	2	3	19	28	19	1	7	5	9	143
Western Slopes—													
Northern ...	3	1	51	...	...	19	43	25	1	8	6	13	176
Central ...	5	1	73	3	...	15	57	20	...	10	11	10	205
Southern ...	11	4	122	4	2	50	107	43	7	19	6	20	395
Plains—													
Northern ...	1	...	31	...	1	5	22	22	2	6	5	6	161
Central ...	1	...	34	...	1	5	16	10	...	6	9	...	82
Riverina ...	4	...	94	...	3	21	86	29	1	16	15	5	274
Western Division	1	2	36	...	1	12	36	11	...	8	7	3	116
Total ...	194	445	3,530	290	307	2,287	2,037	1,188	370	686	139	814	12,287
AVERAGE NUMBER EMPLOYED.*													
Cumberland—													
Metropolis ...	6,065	11,690	103,964	15,284	6,049	33,368	24,754	6,756	4,683	15,504	2,471	13,721	244,309
Balance ...	300	103	2,508	1,184	242	297	1,027	184	...	78	...	177	6,100
North Coast ...	49	90	961	99	...	280	1,896	2,014	25	188	62	126	5,799
Hunter and Manning—													
Greater													
Newcastle ...	532	259	16,109	128	21	1,169	1,045	477	196	314	476	821	21,547
Balance ...	206	284	1,933	438	15	756	1,547	1,777	64	162	122	191	7,495
South Coast—													
Wollongong—													
Pt. Kembla	28	203	6,068	102	1	652	186	193	5	55	210	462	8,165
Balance ...	200	4	451	45	15	246	540	569	2	46	41	235	2,394
Tablelands—													
Northern ...	33	56	295	...	12	124	230	199	2	40	52	30	1,073
Central ...	102	485	2,359	320	30	450	1,308	373	68	173	277	511	6,456
Southern ...	19	3	501	327	40	369	142	87	3	45	35	40	1,601
Western Slopes—													
Northern ...	22	6	356	...	...	77	389	153	2	74	47	63	1,189
Central ...	46	30	395	86	...	114	331	97	...	59	62	37	1,257
Southern ...	54	11	915	455	8	599	1,135	483	24	136	26	88	3,934
Plains—													
Northern ...	2	...	176	...	5	11	108	211	10	25	28	28	604
Central ...	3	...	141	...	8	13	48	61	...	20	37	...	331
Riverina ...	25	...	558	...	9	53	1,321	172	3	76	82	15	2,314
Western Division	7	11	633	...	9	45	213	68	...	81	122	17	1,203
Total ...	7,693	13,235	138,323	18,468	6,464	38,022	26,220	13,874	5,087	17,076	4,150	10,562	315,774

\* Average number during period of operation (including working proprietors).

Amongst the factories in the metropolitan area, the metal working and machinery group predominates; in 1945-46, this group had 43 per cent. of the metropolitan factory workers. Next in order were the textile and clothing factories with 10 per cent. of the factory employees. Metal and machinery workshops are, by far, the most important of the factories centred about Newcastle and Wollongong-Port Kembla, and hold an important place in the Lithgow area in the Central Tableland Division. Butter and bacon factories and sawmills are prominent in the northern coastal districts, and at Broken Hill the treatment of silver-lead-zinc ores, from the mines is the major secondary industry.

The following table shows the number of factories and the average number of factory employees in each metropolitan municipality and in the County of Cumberland in the years 1944-45 and 1945-46. The table is intended to give an indication of the distribution of factories in the metropolis and its environs.

TABLE 556.—Factories in the Metropolis and Environs, 1944-45 and 1945-46.

Municipality,	Area.	1944-45.		1945-46.	
		Establishments.	Average Number of Employees.	Establishments.	Average Number of Employees.
	acres,	No.	No.	No.	No.
City of Sydney—					
Inner Area ... ..	3,220	1,054	19,068	1,158	20,673
Pymont ... ..		61	3,522	68	4,413
Western ... ..		397	11,904	397	11,494
Eastern ... ..		652	18,226	701	19,669
Quay ... ..		367	11,370	300	11,690
Camperdown ... ..		102	4,999	113	5,239
Total ... ..	3,220	2,633	69,089	2,795	73,178
Inner Industrial—					
Paddington ... ..	421	58	1,396	66	1,564
Redfern ... ..	404	290	15,208	241	16,406
Waterloo ... ..	827	207	17,227	220	17,484
Alexandria ... ..	1,051	342	22,338	358	20,248
Mascot ... ..	2,223	98	6,840	94	3,765
Botany ... ..	2,168	82	4,929	82	4,814
St. Peters ... ..	902	87	3,250	91	3,510
Erskineville ... ..	186	45	931	49	1,100
Newtown ... ..	480	192	4,103	190	3,986
Darlington ... ..	54	35	984	36	1,081
Glebe ... ..	518	156	4,278	164	4,496
Annandale ... ..	346	175	4,050	196	4,235
Leichhardt ... ..	1,155	153	3,919	162	4,121
Balmain ... ..	977	179	10,170	199	10,238
Total ... ..	11,712	2,030	99,223	2,148	97,048
Illawarra-Bankstown—					
Marrickville ... ..	1,889	210	11,227	232	10,911
Rockdale ... ..	5,102	92	1,439	107	1,569
Bexley ... ..	1,910	45	304	50	354
Kogarah ... ..	4,807	102	806	110	871
Hurstville ... ..	6,120	98	745	127	1,105
Canterbury ... ..	8,259	245	2,004	269	2,354
Enfield ... ..	1,074	40	792	49	889
Bankstown ... ..	19,205	42	3,346	50	3,289
Total ... ..	48,966	883	20,663	994	21,342
Inner Western—					
Petersham ... ..	850	140	2,162	148	2,334
Ashfield ... ..	2,048	142	5,975	148	4,656
Drumoyne ... ..	1,984	105	4,562	121	4,328
Burwood and Strathfield ... ..	2,942	46	394	188	7,757
Homebush and Concord ... ..	3,313	126	6,772		
Total ... ..	11,137	559	19,865	605	19,075

\* During period of operation (including working proprietors).

TABLE 556—Factories in the Metropolis and Environs—*continued*.

Municipality.	Area.	1944-45.		1945-46.	
		Establish- ments.	Average Number of Employees.	Establish- ments.	Average Number of Employees.
	acres.	No.	No.	No.	No.
Outer Western—					
Lidcombe ... ..	5,228	62	5,741	70	4,771
Auburn ... ..	2,590	81	2,950	111	3,239
Graunville ... ..	4,038	50	3,418	55	3,163
Parramatta and part Holroyd† ...	4,476	158	5,385	174	5,411
Total ... ..	16,332	351	17,494	419	16,584
Northern—					
Manly ... ..	2,847	77	571	91	792
Mosman ... ..	2,152	43	328	44	330
North Sydney ... ..	2,564	206	3,700	219	3,883
Willoughby ... ..	5,480	93	1,256	120	1,520
Ku-ring-gai ... ..	20,235	14	44	17	59
Hunter's Hill ... ..	1,416	37	238	41	304
Lane Cove ... ..	2,566	26	421	33	461
Ryde, Eastwood, Dundas, Ermington and Rydalmere ... ..	14,682	60	857	59	718
Total ... ..	51,942	556	7,415	624	8,064
Eastern—					
Vaucluse, Woollahra, and Waverley ...	4,867	138	901	155	1,294
Randwick ... ..	8,528	145	7,687	152	7,724
Total ... ..	13,395	283	8,588	307	9,018
Total, Metropolis ... ..	156,704	7,304	242,337	7,802	244,309
Balance, County of Cumberland ...	801,657	230	6,963	275	6,100
Total, County of Cumberland ...	958,361	7,534	249,300	8,167	250,409

\* During period of operation (including working proprietors).  
of Holroyd Municipality.

† Pitt and Merrylands wards

In the metropolitan area, factories are concentrated in the City of Sydney and an adjacent industrial belt, in which section 70 per cent. of the factory employees in 1945-46 were engaged. There are relatively few factories in the Northern and Eastern municipalities; in 1945-46, factories in these had only 7 per cent. of the factory employees in the metropolis. The remaining 23 per cent. of factory employees in the metropolis were distributed more or less evenly over the Illawarra-Bankstown and Inner and Outer Western regions.

#### VALUE OF PREMISES AND EQUIPMENT.

The next table shows the variations since 1911 in the recorded value of premises used for manufacturing purposes and of factory plant and machinery. The recorded value of factory premises, machinery, etc., since 1927-28 has been its depreciated or book value, that is, the original cost less any depreciation reserve existing in respect of it; prior to 1927-28 some factory owners stated the value of their premises and plant at original cost. Where factory premises are rented by the occupier, the value of the premises has been computed by capitalising the rent paid at fifteen years' purchase. Rented plant and machinery has been valued by capitalising the rent paid, before the war at fifteen years' purchase, during the war at five years' purchase, and from 1945-46 at ten years' purchase.



TABLE 557.—Value of Factory Premises, Machinery, etc., 1911 to 1945-46.

Year.	No. of Establishments.	Value of Premises.	Value of Machinery, Tools, and Plant.	Average Value per Establishment.	
				Premises.	Machinery, Tools and Plant.
		£	£	£	£
1911	5,039	13,140,207	12,510,600	2,608	2,483
1920-21	5,837	28,428,917	31,115,444	4,870	5,331
1928-29	8,465	51,375,003	51,365,710	6,069	6,068
1930-31	7,544	49,822,312	50,865,884	6,604	6,743
1931-32	7,397	46,462,828	50,277,992	6,281	6,497
1935-36	8,486	49,494,222	51,964,982	5,832	6,124
1938-39	9,464	57,353,625	62,692,956	6,060	6,624
1939-40	9,458	58,939,150	64,801,584	6,232	6,852
1940-41	9,919	61,886,528	68,533,346	6,239	6,909
1941-42	10,166	65,015,509	70,611,613	6,395	6,946
1942-43	10,110	72,622,902	73,121,771	7,183	7,233
1943-44	10,755	78,978,013	73,803,954	7,343	6,860
1944-45	11,359	81,058,876	73,039,252	7,136	6,430
1945-46	12,287	80,308,347	72,560,630	6,536	5,905

The premises owned by the occupiers were valued in 1944-45 at £58,772,776 and in 1945-46 at £56,156,622, and rented premises (valued as described above) at £22,286,100 and £24,151,725, respectively. Machinery, tools, and plant owned by the users were valued in 1944-45 at £71,725,622 and in 1945-46 at £71,259,260, and rented plant, etc. at £1,313,630 and £1,301,370, respectively.

#### NEW INVESTMENT IN FACTORY PREMISES AND EQUIPMENT.

The figures in Table 557 refer to depreciated or book values and do not indicate the expenditure during a year on new factory buildings and equipment and additions and replacements in existing factories. This expenditure, as recorded in annual statistical returns, is shown in the following comparison for the years 1935-36 to 1945-46:—

TABLE 558.—Cost of New Factories, Additions and Replacements, 1935-36 to 1945-46.

Year.	Land and Buildings.	Plant and Machinery.	Total.
	£	£	£
1935-36 ... ..	1,148,105	3,127,517	4,275,622
1936-37 ... ..	1,797,390	4,602,142	6,399,532
1937-38 ... ..	2,142,726	8,585,958	10,728,684
1938-39 ... ..	2,475,380	9,052,938	11,528,318
1939-40 ... ..	2,524,316	6,283,092	8,807,408
1940-41 ... ..	3,078,084	8,686,797	11,764,881
1941-42 ... ..	3,481,755	8,350,793	11,832,548
1942-43 ... ..	7,409,458	8,182,967	15,592,425
1943-44 ... ..	6,539,464	9,593,925	16,133,389
1944-45 ... ..	1,902,615	7,500,628	9,403,243
1945-46 ... ..	2,399,007	9,329,257	11,728,264

The principal industries in which there were additions and replacements of plant and machinery during 1938-39 and later years were as follow:—

TABLE 559.—Cost of Additions and Replacements of Plant and Machinery.

Industry.	1938-39.	1941-42.	1943-44.	1944-45.	1945-46.
Iron and Steel Works, Metals, Machinery, etc.	£ 3,714,615	£ 4,917,935	£ 5,147,873	£ 2,859,373	£ 3,566,391
Works treating Mine and Quarry Products (mainly Coke Works) ... ..	665,225	171,129	235,334	331,230	295,994
Heat, Light and Power Works (mainly Elec- tricity) ... ..	1,923,835	815,516	892,512	921,189	1,036,811
Factories making Food and Drink ... ..	1,080,413	598,490	1,133,732	740,943	1,161,006
Factories engaged in Paper-making, Printing, etc. ... ..	338,841	259,735	175,879	155,309	341,066
All Other ... ..	1,330,009	1,587,988	2,008,595	2,492,584	2,927,389
Total ... ..	9,052,938	8,350,793	9,593,925	7,500,628	9,329,257

## SIZE OF ESTABLISHMENTS.

In the following statement, the factory establishments in New South Wales since 1921 are grouped according to the average number of persons employed during their period of operation. Where two or more classes of manufacturing are conducted in one factory, each class is regarded in the compilation of the factory statistics as being undertaken in a separate establishment.

TABLE 560.—Size of Factories in New South Wales, 1921 to 1945-46.

Year.	Employing on the Average Persons numbering—							
	Under 4.	4.	5 to 10.	11 to 20.	21 to 50.	51 to 100.	Over 100.	Total.
Number of Establishments.								
1921 ...	1,006	500	1,936	1,064	820	265	246	5,837
1928-29	2,466	782	2,387	1,221	963	355	291	8,465
1931-32	2,877	684	1,839	872	692	227	206	7,397
1938-39	2,720	976	2,534	1,316	1,101	438	379	9,464
1940-41	3,125	909	2,520	1,335	1,132	450	448	9,919
1941-42	3,207	929	2,524	1,365	1,190	447	504	10,166
1942-43	3,171	929	2,488	1,374	1,179	449	520	10,110
1943-44	3,505	924	2,571	1,472	1,290	462	531	10,755
1944-45	3,612	965	2,824	1,609	1,319	503	527	11,359
1945-46	3,536	1,118	3,304	1,803	1,490	518	518	12,287
Average Number Employed during period of Operation (including working proprietors).								
1921 ...	2,256	2,000	13,462	15,469	26,006	18,061	67,757	145,011
1928-29	4,997	3,128	16,556	17,729	30,631	24,331	87,770	185,142
1931-32	5,525	2,736	12,519	12,750	21,689	15,683	61,350	132,252
1938-39	5,708	3,904	17,553	19,272	35,234	31,223	118,906	231,800
1940-41	6,421	3,636	17,349	19,572	36,013	31,767	153,122	267,880
1941-42	6,491	3,716	17,390	19,908	37,810	31,834	184,971	302,120
1942-43	6,474	3,716	17,305	20,167	37,012	31,595	202,048	318,317
1943-44	7,086	3,696	17,874	21,312	40,825	32,824	202,539	326,156
1944-45	7,261	3,860	19,668	23,485	41,459	35,022	186,432	317,187
1945-46	7,302	4,472	22,902	26,395	46,458	36,155	172,090	315,774

Factory establishments which operated in New South Wales during 1945-46 are classified in the next table according to size and geographical location:—

TABLE 561.—Size and Geographical Location of Establishments, 1945-46.

Average Number Employed during Period of Operation.	Number of Establishments.				Number of Persons Employed* (including working proprietors).				
	Metro- polis.	Newcastle and Wollon- gong Districts.	Re- mainder of State.	New South Wales.	Metro- polis.	Newcastle and Wollon- gong Districts.	Re- mainder of State.	New South Wales.	
Less than 4	...	1,866	162	1,508	3,536	3,823	311	3,168	7,302
4 ...	...	579	61	478	1,118	2,316	244	1,912	4,472
5 to 10...	...	2,063	143	1,098	3,304	14,429	1,016	7,457	22,902
11 to 20...	...	1,294	81	428	1,803	19,173	1,148	6,074	26,395
21 to 50...	...	1,230	64	196	1,490	38,607	1,952	5,899	46,458
51 to 100	...	434	33	51	518	30,364	2,446	3,345	36,155
101 to 200	...	237	10	35	282	32,289	1,451	4,888	38,628
201 to 300	...	72	6	7	85	17,616	1,405	1,715	20,736
301 to 400	...	36	3	4	43	12,132	1,020	1,420	14,572
401 to 500	...	20	3	3	26	9,113	1,270	1,413	11,796
501 to 750	...	32	7	2	41	19,614	4,318	1,316	25,248
751 to 1,000	...	11	1	1	13	9,756	985	794	11,535
Over 1,000	...	18	8	2	28	35,077	12,146	2,352	49,575
Total	...	7,892	582	3,813	12,287	244,309	29,712	41,753	315,774

\* Average during period of operation.

Small factories are numerous. Establishments having ten or fewer workers in 1945-46 comprised 65 per cent. of the total number, but these occupied only 10 per cent. of the persons in factories. The greater part of the factory workers, however, is engaged in the large establishments and the proportion so occupied tends to increase. Thus, in 1945-46 there were only 518 factories (4.2 per cent. of the total) having an average of more than 100 persons engaged, but in these factories nearly 61 per cent. of all factory workers were occupied. In 1938-39 the comparative figures were: 379 factories (4 per cent. of the total) occupying 51.3 per cent. of all persons engaged in factories.

These characteristics apply in the metropolitan area and in the Newcastle and Wollongong-Port Kembla industrial areas, but elsewhere in the State the small manufacturing units predominate. In 1945-46 the percentage of establishments with more than 100 workers was 5.4 per cent. in the metropolis and 6.5 per cent. in the Newcastle and Wollongong-Port Kembla districts, and these establishments employed 56 per cent. and 76 per cent. of all persons in factories in the respective areas.

The most numerous of the factories with less than four employees are boot repairing establishments and garages where motor repairs are effected. In 1945-46, boot repairing establishments numbered 793 with 1,598 employees, including 709 with 1,054 employees where less than four were employed. The number of works for motor repairs was 1,240 with 8,316 employees, including 489 with 1,080 employees where less than four persons were engaged.

#### RELATIVE GROWTH OF FACTORY EMPLOYMENT.

In the following table the growth in factory employment is compared with the increase in the total population since 1901. The comparison is shown in quinquennial periods up to 1926. Then two periods are combined in order to smooth the fluctuations in factory employment during

the depression. The decrease in factory employees between 1926-27 and 1930-31 represented an average rate of 4.9 per cent. per annum, and the increase in the next five years 10.3 per cent. per annum. During the ten years 1936-37 to 1945-46, employment in factories increased at an average annual rate of 6.1 per cent.

TABLE 562.—Relative Growth of Factory Employment in N.S.W.

Period.		Growth in Factory Employment.		Growth in Population.
Calendar or Financial Years.	Duration.	Numerical Increase.*	Annual Rate of Increase.	Annual Rate of Increase.
	years.		per cent.	per cent.
1902 to 1906 ...	5	11,592	3.5	1.7
1907 to 1911 ...	5	30,802	7.9	2.6
1912 to 1915-16 ...	4½	7,777	1.6	2.4
1916-17 to 1920-21 ...	5	23,610	4.9	2.1
1921-22 to 1925-26 ...	5	24,763	3.4	2.2
1926-27 to 1935-36 ...	10	23,426	1.4	1.3
1936-37 to 1940-41 ...	5	72,551	7.5	0.9
1941-42 to 1945-46 ...	5	45,119	3.4	1.0

\* Relates to average number employed over the whole year, including working proprietors.

## EMPLOYMENT IN FACTORIES.

The following comparative statement shows the average number of persons engaged in the various classes of manufacturing industries during 1928-29, 1945-46, and certain intervening years:—

TABLE 563.—Employment in New South Wales Factories, 1928-29 to 1945-46.

Class of Industry.	Number Employed, including Working Proprietors (average over whole year).							
	1928-29.	1931-32.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Treatment of Non-metal- liferous Mine and Quarry Products ...	4,060	1,638	4,529	4,448	3,705	3,547	3,556	4,376
Bricks, Pottery, Glass ...	6,074	2,391	8,312	8,405	6,124	5,669	6,212	7,466
Chemicals, Paint, Oil, Grease ...	6,137	5,135	8,187	10,593	11,278	11,788	12,229	13,164
Industrial Metals, Machines, Conveyances ...	62,090	38,981	82,452	132,444	158,113	163,023	151,076	136,602
Precious Metals, Jewellery Textiles and Textile Goods (not Dress) ...	775	476	979	1,016	771	857	893	1,110
Skins, Leather (not Cloth- ing or Footwear) ...	8,894	9,989	15,089	21,049	21,366	20,383	19,426	18,341
Clothing ...	3,246	3,278	4,306	5,618	5,438	6,016	5,854	6,385
Food, Drink, Tobacco ...	28,473	19,669	32,019	34,367	31,637	32,188	34,668	37,051
Woodworking, Basketware Furniture, Bedding ...	22,490	20,054	28,514	32,055	32,212	33,662	34,152	35,474
Paper, Printing ...	8,864	3,898	9,095	12,132	11,998	12,815	12,902	13,499
Rubber ...	5,737	2,527	6,140	5,350	4,035	3,920	4,010	4,987
Musical Instruments ...	13,932	11,331	17,290	17,155	15,380	15,095	15,834	16,959
Miscellaneous Products ...	2,775	1,786	3,538	4,140	3,489	4,005	3,814	3,990
Heat, Light, Power ...	1,257	540	286	307	277	262	280	311
	1,504	1,826	3,981	5,691	5,994	6,096	5,995	6,407
	3,848*	2,896	3,164	3,475	3,717	3,706	3,777	4,148
Total ...	180,756	126,355	228,781	298,245	315,534	323,032	314,678	310,870

\* Includes some employment on maintenance work not included in later years.

Employment in factories attained the pre-depression record number of 180,756 in 1928-29 and then declined rapidly to 126,355 in 1931-32. Recovery began in 1932-33, and by 1935-36 employment (193,200) surpassed the pre-depression level. Thereafter it rose steadily and in 1938-39 there were 228,781 persons employed in factories (27 per cent. more than in 1928-29). The expansion which commenced after the outbreak of hostilities in 1939 accelerated upon the entry of Japan into the war in 1941. Between 1938-39 and 1940-41, the number of factory employees rose by 16 per cent. to 265,751, and at the peak in 1943-44 the number had increased 41 per cent. over the 1938-39 level to 323,032. Cessation of war-time activities and conversion of industry to a peace-time basis are reflected in the subsequent decline of factory employment, but even so, the number of employees on factory payrolls in 1945-46 was 310,370, or 36 per cent. more than in 1938-39 and 72 per cent. more than in 1928-29.

In 1928-29, 34 per cent. (62,090) of the persons engaged in factories were occupied in the manufacture of industrial metals, machines, etc. Employment in these workshops declined by 37 per cent. between 1928-29 and 1931-32, but increased by 1938-39 to 82,452, and was then 33 per cent. higher than in 1928-29. As a result of war-time expansion, the number rose to 163,023 in 1943-44 (98 per cent. above the pre-war level) and the subsequent decline to 136,602 in 1945-46 reflected the curtailment of war production. In this year, metal and machinery workshops employed 66 per cent. more persons than in 1938-39, and absorbed 44 per cent. of the total number of factory workers, compared with 50 per cent. in 1943-44 and 36 per cent. in 1938-39.

Employment in textile and clothing factories fell by 21 per cent. from 37,367 in 1928-29 to 29,658 in 1931-32 and thereafter increased steadily, and in 1938-39 was 47,108 or 26 per cent. greater than in 1928-29. This upward trend continued until 1942-43 when employment declined slightly due to diversion of labour to the forces and to the rationing of civilian clothing. By 1945-46 the number employed had risen again to 55,992, which was 19 per cent. greater than in 1938-39 and 50 per cent. greater than in 1928-29. The proportion of factory workers in textile and clothing factories in 1945-46 was 18 per cent. compared with 21 per cent. in both the pre-war year and 1928-29.

In food, drink, and tobacco factories, employment fell by 11 per cent. from 22,490 in 1928-29 to 20,054 in 1931-32 and then rose steadily to 28,514 in 1938-39, when it was 27 per cent. greater than in 1928-29. Growth was unchecked during the war years and in 1945-46 these factories employed 35,474, 24 per cent. more than in 1938-39 and 58 per cent. more than in 1928-29. Twelve per cent. of the total number of factory workers were in these factories in both the pre-depression and pre-war years and 11 per cent. in 1945-46.

#### *Nature of Employment.*

During 1945-46 an average of 315,774 persons were engaged in the manufacturing industries. Of these, 3 per cent. were working proprietors, 10 per cent. comprised the managerial and clerical staff, and 1 per cent. were chemists, engineers, draftsmen, etc.; 85 per cent. of those employed in factories were engaged in the actual processes of manufacture, in the sorting and packing of finished articles, and as foremen and overseers.

Of the males employed in the manufacturing industries in this year, 4 per cent. were working proprietors, 8 per cent. managerial and clerical staff, 1 per cent. technical staff, and 86 per cent. were foremen and factory workers engaged in the actual processes of manufacture; etc. The corresponding percentages for female factory workers were 1, 17, 1, and 81.

The following table contains a classification of the average employment in factories during 1945-46 in each class of industry:—

TABLE 564.—Classification of Factory Employment, 1945-46.

Class of Industry.	Working Proprietors.	Managerial and Clerical Staff.	Chemists, Draftsmen and other Technical Staff.	Foremen and Overseers.	Workers in Factory or Mill.		Carters, Messengers and Others.	Total (average during period of operation).
					Males.	Females.		
Treatment of Non-metalliciferous Mine and Quarry Products ...	152	455	107	170	3,538	38	23	4,483
Bricks, Pottery, Glass ...	102	643	26	218	6,346	321	37	7,093
Chemicals, Paint, Oil, Grease ...	168	2,136	626	511	6,693	2,950	151	13,235
Industrial Metals, Machines, Conveyances ...	2,720	15,157	2,515	4,915	103,693	8,843	480	138,323
Precious Metals, Jewellery, Textiles and Textile Goods (not Dress) ...	122	125	1	42	710	141	7	1,148
Skins, Leather (not Clothing or Footwear) ...	144	1,188	29	659	6,445	9,905	98	18,468
Clothing ...	266	458	13	212	3,670	1,803	40	6,464
Food, Drink, Tobacco ...	2,104	2,043	28	874	7,121	26,117	335	38,622
Woodworking, Basketware, Furniture, Bedding ...	1,439	4,457	268	1,178	18,880	9,696	293	30,220
Paper, Printing ...	1,013	1,218	24	441	10,796	274	108	13,874
Rubber ...	316	429	6	173	3,271	872	20	5,087
Musical Instruments ...	491	2,242	49	607	9,209	4,126	292	17,076
Miscellaneous Products	96	490	98	102	2,378	576	205	4,011
Heat, Light, Power	9	55	1	16	179	53	...	313
	247	684	50	316	3,190	1,967	153	6,007
	25	349	79	183	3,467	7	40	4,150
Total—Males ...	8,684	17,912	3,451	9,718	189,595	...	1,704	231,014
Females ...	780	14,223	469	1,019	...	67,691	578	84,760
Total ...	9,414	32,135	3,920	10,737	257,286	...	2,282	315,774

Very little work is given out at piece rates and most of the workers employed in their own homes are engaged in textile and clothing manufacture. Outworkers in the clothing trades must be licensed annually by the Industrial Registrar in terms of the Factories and Shops Act. The licenses may be granted to persons who are in necessitous circumstances or are unable to work in factories owing to domestic ties or for other sufficient reason. An occupier of a factory may not employ more than one licensed outworker to every ten indoor workers or fraction thereof, except with the approval of the Industrial Registrar.

The next table contains a classification of average employment in factories during period of operation in certain years 1928-29 to 1945-46. Because of a change in the grouping of employees in 1945-46, it is not possible to classify employment in this year on a basis rigidly comparable with that used in previous years. In this table, factory workers have been arranged in broad groups to give approximate comparability between 1945-46 and earlier years.

TABLE 565.—Classification of Factory Employment, 1928-29 to 1945-46.

Year.	Working Proprietors.		Managerial, Clerical, Technical Staff.		Foremen, Workers in Factory or Mill, Carters, etc.		Total (Average during period of operation).		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Total.
1928-29 ...	0,464	421	12,471	4,697	120,169	40,920	139,104	46,038	185,142
1931-32 ...	5,779	324	10,159	4,066	79,310	32,614	95,248	37,004	132,252
1935-36 ...	6,464	413	13,040	5,823	124,576	46,818	144,080	53,054	197,134
1936-37 ...	6,765	442	14,025	6,475	133,310	50,049	154,100	56,966	211,066
1937-38 ...	7,059	489	15,047	7,093	144,759	53,436	166,865	61,018	227,883
1938-39 ...	7,202	502	15,961	7,584	146,350	54,201	169,513	62,287	231,800
1939-40 ...	7,128	492	16,834	8,096	150,215	56,587	174,177	65,175	239,352
1940-41 ...	7,497	563	17,909	9,402	170,449	61,970	195,945	71,935	267,880
1941-42 ...	7,563	566	19,581	11,364	192,869	70,177	220,013	82,107	302,120
1942-43 ...	7,894	645	20,489	13,554	198,022	78,263	225,855	92,462	318,317
1943-44 ...	7,917	718	21,615	15,359	199,313	81,234	228,845	97,311	326,156
1944-45 ...	8,203	771	22,246	15,397	195,023	75,547	225,472	91,715	317,187
1945-46 ...	8,634	780	21,363	14,692	201,017	69,288	231,014	84,760	315,774

*Sex Distribution of Factory Employees.*

The following table shows the number of male and female employees in factories, and the proportion of the mean male and female population working in factories in 1945-46 and selected earlier years:—

TABLE 566.—Sex of Factory Employees, 1920-21 to 1945-46.

Year.	Males.		Females.		Total.	
	Number Employed. *	Number per 1,000 Mean Male Population.	Number Employed. *	Number per 1,000 Mean Female Population.	Number Employed. *	Number per 1,000 Mean Population.
1920-21 ...	107,700	101.0	31,511	30.8	139,211	66.6
1928-29 ...	135,772	107.1	44,983	37.0	186,756	72.8
1931-32 ...	90,667	69.5	35,688	28.2	126,355	49.2
1935-36 ...	140,896	104.8	52,304	39.8	193,200	72.7
1937-38 ...	164,391	120.1†	60,470	45.1	224,861	83.0
1938-39 ...	167,172	121.1†	61,609	45.4†	228,781	83.6†
1939-40 ...	172,259	123.7†	64,715	47.2	236,974	85.7†
1940-41 ...	194,194	138.5†	71,557	51.5†	265,751	95.2†
1941-42 ...	216,856	153.7†	81,389	58.0†	298,245	106.0†
1942-43 ...	223,669	156.8†	91,865	64.7†	315,534	110.9†
1943-44 ...	226,824	157.8†	96,208	67.1†	323,032	112.5†
1944-45 ...	223,770	154.3†	90,908	62.6†	314,673	108.4†
1945-46 ...	227,454	155.3	83,416	56.8	310,870	106.0

\* Average during whole year, including working proprietors.

† Revised since last issue.

In 1945-46 the manufacturing industries provided employment for 10.6 per cent. of the population, compared with 6.7 per cent. in 1920-21, 4.9 per cent. in 1931-32, 8.4 per cent. in 1938-39, and the peak of 11.25 per cent. in 1943-44. The employment in 1945-46 comprised 15.5 per cent. of the male population and 5.7 per cent. of the female population; in 1943-44, 15.8 per cent. and 6.7 per cent.; and in 1920-21, 10.1 per cent. and 3.1 per cent., respectively.

The number (average over the whole year) and proportion of females employed in various classes of factories are shown below:—

TABLE 567.—Female Employees in Factories, 1938-39 to 1945-46.

Industry.	Number of Female Employees. (Average over whole year, including working proprietors.)				Proportion of Female Employees to Total Employees.			
	1938-39.	1943-44.	1944-45.	1945-46.	1938-39.	1943-44.	1944-45.	1945-46.
Chemicals, Drugs, Medicines	1,189	1,936	1,975	2,219	per cent.	per cent.	per cent.	per cent.
Engineering, Brass, Copper	436	2,580	2,689	2,870	42.2	40.6	39.0	39.6
Electrical Machinery, Wire- less ... ..	1,869	7,767	7,313	5,866	3.5	9.0	9.4	6.3
Motor Vehicles and Acces- sories ... ..	737	1,272	1,230	1,125	18.5	34.9	32.8	27.5
Galvanised Iron, Tinsmith- ing ... ..	857	1,024	1,732	1,505	6.6	13.0	12.0	10.0
Cotton ... ..	1,016	2,611	2,420	1,896	13.2	21.8	20.0	16.4
Wool, Worsted, and Shoddy	3,722	4,939	4,031	3,336	59.2	65.2	61.3	56.1
Hosiery, other knitted Goods ... ..	4,011	4,097	4,107	3,900	55.5	60.5	57.4	49.1
Machine Belting, Bags, Trunks ... ..	698	1,492	1,379	1,612	75.7	81.5	80.5	77.2
Tailoring, Slop Clothing ...	9,939	10,819	12,003	12,848	40.9	68.4	65.0	62.7
Dressmaking, Millinery ...	3,178	2,321	2,592	2,018	82.5	85.7	85.8	84.7
Shirts, Underclothing, Ties, etc. ... ..	5,077	5,201	5,611	5,992	94.1	94.8	94.4	93.2
Boots and shoes (including Repairs and Accessories)	3,198	3,154	3,116	3,219	91.6	92.1	86.2	90.5
Biscuits ... ..	1,640	1,525	1,102	891	45.0	41.8	41.2	40.6
Sugar Confectionery ...	2,023	1,626	1,527	1,422	01.5	56.3	52.2	47.6
Jam, Fruit, and Vegetable Canning ... ..	562	1,242	1,431	1,314	59.3	58.1	55.6	52.8
Condiments, Coffee, Spices	949	1,258	1,215	1,187	53.3	48.6	48.5	48.5
Tobacco ... ..	1,942	1,977	1,959	1,836	02.8	06.5	64.4	62.5
Newspapers, Printing, Bind- ing ... ..	2,894	2,849	3,004	2,928	02.5	06.6	05.0	61.3
Stationery, Paper Bags, etc.	2,398	2,637	2,414	2,173	24.5	21.5	30.8	26.4
Rubber ... ..	1,199	1,210	946	810	60.0	61.7	48.3	46.0
All other Industries ...	11,545	31,771	27,112	21,549	35.9	30.2	24.8	20.3
Total ... ..	61,609	96,208	90,908	83,416	11.6	20.8	18.6	15.9
					26.9	29.8	28.9	26.8

In 1938-39, 26.9 per cent. of all persons working in factories were females. The proportion rose to 29.8 per cent. in 1943-44, but by 1945-46 it had receded to 26.8 per cent. The overall increase of 21,807 in the number of female employees between 1938-39 and 1945-46 was the net result of an increase of 34,599 up to 1943-44 and a subsequent decrease of 12,792.

The proportion of females employed in metal and machinery works is small, but in 1945-46 it was much greater than in 1938-39.

Females predominate in most factories engaged in the manufacture of textiles and clothing. The proportion of females occupied in these factories in 1945-46 was a little lower than in 1938-39, with the exceptions of men's order- and ready-made outerwear and hosiery and knitted goods, where the proportion was slightly higher. Dressmaking, millinery and woollen and worsted were the only industries in this group where the number of females employed was less in 1945-46 than in 1938-39.

In most factories comprising the food, drink, and tobacco class, the number and proportion of female employees declined between 1938-39 and 1945-46.



*Ages of Factory Employees.*

The following comparative statement shows factory employees classified in three age groups: under sixteen years, sixteen and under twenty-one years, and adults. Until 1936-37 the numbers of factory employees in age groups were recorded as averages over the whole year, and working proprietors were included. Since 1936-37 the ages of factory employees have been recorded as at 15th June and working proprietors have been excluded.

TABLE 568.—Age and Sex of Factory Employees, 1911 to 1945-46.

Year.	Under 16 Years.			16 and under 21 Years.			Adults.			Grand Total.
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
Average over whole year (including working proprietors).										
1911*	2,381	2,182	4,563	Not available.			†76,624	†23,364	†99,988	104,551
1921	3,526	3,466	6,992	13,420	9,998	23,418	90,754	18,047	108,801	139,211
1928-29	3,958	5,054	9,012	23,354	17,663	41,017	108,461	22,266	130,727	180,756
1930-31	1,826	2,734	4,560	16,624	13,143	29,767	75,431	17,847	93,278	127,605
1936-37	5,724	7,551	13,275	20,664	22,593	52,257	116,676	26,289	142,965	208,497
At 15th June (working proprietors excluded).										
1937	5,888	7,539	13,427	30,601	22,630	53,231	113,509	25,659	139,168	205,826
1939	5,759	7,084	12,843	31,923	24,289	56,212	122,041	28,529	150,570	219,625
1941	5,901	6,799	12,700	38,325	29,275	67,600	155,847	37,631	193,478	273,778
1942	5,125	4,668	9,793	29,588	27,949	57,537	176,801	49,825	226,626	293,956
1943	4,221	3,158	7,379	27,247	27,933	55,180	187,484	63,475	250,959	313,518
1944	3,881	3,014	6,895	28,098	27,012	55,110	185,828	61,754	247,582	309,617
1945	3,287	2,870	6,157	29,331	24,816	54,147	182,164	59,249	241,413	301,717
1946	2,451	2,265	4,716	30,089	23,353	53,442	203,801	56,701	260,502	318,660
Percentage of Total Employees.										
Average over whole year (including working proprietors).										
1911*	2.3	2.1	4.4	Not available.			†73.3	†22.3	†95.6	100.0
1921	2.5	2.5	5.0	9.7	7.2	16.9	65.2	12.9	78.1	100.0
1928-29	2.2	2.8	5.0	12.9	9.8	22.7	60.0	12.3	72.3	100.0
1930-31	1.4	2.1	3.5	13.1	10.3	23.4	59.1	14.0	73.1	100.0
1936-37	2.7	3.6	6.3	14.2	10.9	25.1	58.0	12.6	68.6	100.0
At 15th June (working proprietors excluded).										
1937	2.9	3.7	6.6	14.9	11.0	25.9	55.1	12.4	67.5	100.0
1939	2.6	3.2	5.8	14.5	11.1	25.6	55.6	13.0	68.6	100.0
1941	2.2	2.5	4.7	14.0	10.7	24.7	56.9	13.7	70.6	100.0
1942	1.7	1.6	3.3	10.1	9.5	19.6	60.1	17.0	77.1	100.0
1943	1.4	1.0	2.4	8.7	8.9	17.6	59.3	20.2	80.0	100.0
1944	1.2	1.0	2.2	9.1	8.7	17.8	60.0	20.0	80.0	100.0
1945	1.1	1.0	2.1	9.7	8.2	17.9	60.4	19.6	80.0	100.0
1946	0.8	0.7	1.5	9.4	7.3	16.7	64.0	17.8	81.8	100.0

\* Estimated.

† Adults and employees 16 to 21 years.

At 15th June, 1946, 74.2 per cent. of factory employees (excluding working proprietors) were males and 25.8 per cent. were females, compared with 72.7 per cent. and 27.3 per cent. in 1939. Of the male employees, 3.6 per cent. in 1939 and 1.0 per cent. in 1946 were under 16 years of age, 20.0 per cent. and 12.7 per cent. were aged 16 and under 21 years, and 76.4 per cent. and 86.3 per cent. were adults. The corresponding proportions for female employees were 11.8 and 2.7 per cent., 40.6 and 28.4 per cent., and 47.6 and 68.9 per cent.

Juveniles under 16 years of age represented 1.5 per cent. compared with 2.4 per cent. in 1943 and 5.8 per cent. in 1939. Between 1939 and 1946 the number of these ages decreased by 8,127 (3,308 boys and 4,819 girls) to 4,716, reflecting the gradual raising of the minimum school leaving age from 14 years in 1940 to 15 years in 1943 and the abnormally low birthrate during the depression years.

Employees aged 16 to 21 years increased by 11,388 (6,402 youths and 4,986 girls) between 1939 and 1941, and then, owing mainly to enlistments in the Forces, decreased by 12,420 (11,078 youths and 1,342 girls) in the next two years. In 1946, there were a few more youths and appreciably fewer girls than in 1943 and the total in this age group was 53,442, compared with 55,180 in 1943, 67,600 in 1941, and 56,212 in 1939. The proportion of employees aged 16 to 21 years declined from 25.6 per cent. (14.5 per cent. youths and 11.1 per cent. girls) in 1939 to 16.7 per cent. (9.4 per cent. and 7.3 per cent.) in 1946.

The whole of the increase in factory employees between 1939 and 1946 comprised adults. The proportion in this group rose from 68.6 per cent. (55.6 per cent. men and 13.0 per cent. women) in 1939 to 80.0 per cent. (59.8 per cent. males and 20.2 per cent. females) in 1943, and to 81.8 per cent. in 1946, despite a decline in the proportion of females to 17.8 per cent. In number, adults increased by 100,389 (65,443 males and 34,946 females) from 150,570 in 1939 to 250,959 in 1943. From 1943 to 1945 there was a loss of 5,320 men, and 21,637 men were gained in the following year, but over these three years women employees decreased by 6,774. Adult employees numbered 260,502 in 1946, which was 109,932 (81,760 males and 28,172 females) more than in 1939.

#### *Child Labour in Factories.*

The Factories and Shops Act prescribes that no child under school-leaving age (15 years since 1943) may be employed in a factory unless by special permission of the Minister for Labour and Industry, and the Minister may prohibit the employment of children under the age of 16 years in any factory in connection with dangerous machinery or in any work in which he considers it undesirable that they should be engaged. Moreover, the employment of children under 16 years of age is not permitted unless the employer has obtained a certificate by a legally qualified medical practitioner regarding the child's fitness for employment in that factory.

The number of certificates of fitness issued to children under 16 years of age in recent years is shown below:—

		1939.	1942.	1943.	1944.	1945.	1946.
Boys	...	6,023	3,943	4,192	4,287	3,805	3,461
Girls	...	6,175	2,695	2,554	3,278	3,178	3,095
Total	...	12,198	6,638	6,746	7,565	6,983	6,556

#### *Monthly Factory Employment.*

Monthly data of the number of employees on factory payrolls (excluding working proprietors) on the pay day nearest the fifteenth of the month have been collected in respect of each month since July, 1932. The following table shows the number of factory employees in each of the months July, 1935 to June, 1946. Corresponding data in respect of the various types of manufacturing industries are published in the "New South Wales Statistical Register".

TABLE 569.—Number of Factory Employees, Monthly, 1935-36 to 1945-46.

Year.	Employees on Factory Pay Rolls on the Pay Day nearest to the 15th of each Month (excluding working proprietors).											
	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.
Males—(Thousands).												
1935-36	129.0	129.9	131.5	133.3	136.3	137.0	134.6	134.6	136.8	137.7	139.8	139.8
1936-37	136.3	137.5	138.7	141.2	143.0	143.3	142.1	146.2	146.7	145.9	147.5	149.8
1937-38	150.9	152.3	153.1	155.3	156.8	158.0	156.5	157.0	158.6	157.8	158.6	159.4
1938-39	158.0	158.9	159.0	159.2	159.3	158.9	156.9	158.3	159.8	158.7	159.4	159.7
1939-40	158.8	158.5	159.6	163.8	166.3	168.3	166.8	166.6	168.0	164.2	159.5	166.6
1940-41	172.5	175.9	178.1	179.6	183.9	186.6	185.9	189.6	194.9	193.1	197.4	200.1
1941-42	202.1	203.7	205.6	208.0	210.5	213.2	210.2	210.9	212.2	211.8	212.2	211.6
1942-43	213.3	214.0	213.9	214.4	214.9	215.7	216.6	217.2	218.4	219.1	219.0	218.9
1943-44	217.8	218.7	219.2	219.4	219.5	220.0	219.9	219.8	219.6	218.1	217.7	217.8
1944-45	217.6	217.1	216.3	215.2	215.2	216.1	215.3	215.7	215.4	215.2	213.5	214.8
1945-46	216.6	216.9	212.7	209.0	205.2	194.8	215.1	224.9	229.0	231.4	234.6	236.4
Females—(Thousands).												
1935-36	47.2	48.4	49.9	51.0	51.9	52.2	48.5	51.8	53.4	52.4	52.8	52.0
1936-37	51.8	53.1	54.3	55.0	55.5	54.8	51.6	55.1	56.7	56.3	56.0	56.0
1937-38	56.5	57.9	58.8	59.4	60.0	60.6	56.7	59.9	61.1	60.8	60.8	60.2
1938-39	59.9	60.6	61.2	61.8	61.9	61.7	57.0	60.3	61.4	61.0	60.5	59.9
1939-40	59.3	60.5	61.2	63.0	64.2	64.0	61.8	64.1	66.0	65.4	64.3	64.2
1940-41	65.4	66.8	68.6	69.8	70.8	71.5	68.9	71.7	73.3	72.5	73.2	73.7
1941-42	76.0	77.3	75.0	79.5	80.7	81.8	79.4	80.8	81.8	81.8	82.6	82.4
1942-43	84.8	85.3	86.4	88.1	89.3	91.1	90.4	91.4	92.6	93.8	93.9	94.6
1943-44	94.6	95.4	96.4	96.8	96.9	96.4	94.4	94.0	94.8	94.2	92.2	91.8
1944-45	91.6	91.1	90.7	90.1	89.7	89.7	87.5	88.3	88.8	87.7	87.6	86.9
1945-46	85.7	86.0	84.7	81.7	81.5	75.7	79.5	80.3	82.4	81.7	82.2	82.3
Total—(Thousands).												
1935-36	176.2	178.3	181.4	184.3	188.2	189.2	183.1	186.4	190.2	190.1	192.6	191.8
1936-37	188.1	190.6	193.0	196.2	198.5	198.1	193.7	200.3	203.4	202.2	203.5	205.8
1937-38	207.4	210.2	211.9	214.7	216.8	218.6	213.2	216.9	219.7	218.6	219.4	219.6
1938-39	217.9	219.5	220.2	221.6	221.2	220.6	213.9	218.6	221.2	219.7	219.9	219.6
1939-40	218.1	219.0	220.8	226.8	230.5	232.3	228.6	230.7	234.0	229.6	223.8	230.8
1940-41	237.0	242.7	246.7	249.4	254.7	258.1	254.8	261.3	268.2	265.6	270.6	273.8
1941-42	278.1	281.0	280.6	287.5	291.2	295.0	289.6	291.7	294.0	293.6	294.8	294.0
1942-43	298.1	299.3	300.3	302.5	304.2	306.8	307.0	308.6	311.0	312.9	312.9	313.5
1943-44	312.4	314.1	315.6	316.2	316.4	316.4	314.3	313.8	314.4	312.3	309.9	309.6
1944-45	309.2	308.2	307.0	305.3	304.9	305.8	302.8	304.0	304.2	302.9	301.1	301.7
1945-46	302.3	302.9	297.4	290.7	286.7	270.5	294.6	305.2	311.4	313.1	316.8	318.7

The rapid and generally sustained rise in the level of factory employment after September, 1939 reflects the war-time expansion in factory activity. The decline in employment between March and May, 1940 was the result of restricted coal supplies accompanying an industrial dispute in the coal industry, and for similar reasons employment declined materially between August and December, 1945. In 1945-46 employment was affected also by the conversion of industries to a peace-time basis.

Seasonal variations in the level of factory employment are of little magnitude. The level of female employment fluctuates rather more than does that of male employment, and for the greater part the variations are incidental to the Christmas holiday period and, as regards females, to the fruit processing season.

#### SALARIES AND WAGES IN FACTORIES.

The amounts of salaries and wages quoted throughout this chapter are exclusive of amounts drawn by working proprietors.

The following table contains a comparison of the salaries and wages paid to male and female factory employees and the average earnings per employee during 1945-46 and earlier years. Corresponding information in respect of individual industries is published in the "New South Wales Statistical Register".

TABLE 570.—Salaries and Wages Paid in Factories, 1911 to 1945-46.

(Exclusive of drawings by working proprietors.)

Year.	Amount.			Average per Employee.		
	Paid to Males.	Paid to Females.	Total.	Male.	Female.	Person.
	£	£	£	£ s.	£ s.	£ s.
1911 ...	8,917,583	1,130,079	10,047,662	118 18	44 16	100 5
1920-21 ...	22,766,216	2,852,375	25,618,591	219 15	91 5	190 0
1928-29 ...	33,508,975	5,035,712	38,544,687	258 15	112 19	221 8
1930-31 ...	21,605,432	3,594,858	25,200,290	244 7	107 11	206 16
1931-32 ...	19,258,969	3,492,044	22,751,013	226 1	98 14	188 14
1935-36 ...	28,576,202	4,738,332	33,314,534	212 7	91 6	178 13
1938-39 ...	38,271,867	6,334,630	44,606,497	238 14	103 13	201 13
1939-40 ...	40,807,966	6,884,585	47,692,551	246 19	107 3	207 17
1940-41 ...	49,539,287	8,220,245	57,759,532	265 4	115 16	224 1
1941-42 ...	64,850,115	10,907,541	75,757,656	309 13	134 19	261 0
1942-43 ...	74,554,087	14,346,149	88,900,236	344 12	157 5	289 0
1943-44 ...	77,087,334	16,430,992	93,518,326	352 0	172 1	297 7
1944-45 ...	73,934,690	15,308,351	89,243,041	342 17	169 17	291 17
1945-46 ...	73,380,046	14,267,414	87,647,460	335 7	172 13	290 15

The amount of salaries and wages paid to factory employees rose 110 per cent. from £44,606,000 in 1938-39 to a record of £93,518,000 in 1943-44, of which £77,087,000 (101 per cent. more than in 1938-39) was paid to male employees and £16,431,000 (159 per cent. more than in 1938-39) to female employees. Then followed a decline, and in 1945-46 salaries and wages amounted to £87,647,000, which was 96 per cent. above the pre-war level and comprised payments to male employees of £73,380,000 and to female employees of £14,267,000 (92 per cent. and 125 per cent., respectively, more than in 1938-39). The average payment per employee rose from £202 (£239 per male employee and £104 per female employee) in 1938-39 to £297 (£352 and £172) in 1943-44, and then declined to £291 (£335 per male and £173 per female employee) in 1945-46, when the average earnings per employee were 44 per cent. (males 40 per cent. and of females 67 per cent.) higher.

than in the pre-war year 1938-39. These movements reflect rising rates of pay to factory workers, the rise and fall in overtime earnings, and changes in the average number and age constitution of employees between 1938-39 and 1945-46.

In calculating the average earnings per employee, the aggregate salaries and wages paid have been related to the average number of employees (including juveniles but excluding working proprietors) working during the whole year. The amounts therefore represent the average payment received by an employee for a full year's work. The average earnings of men and boys so calculated in 1945-46 were highest in heat, light, and power works £371 17s. 2d., rubber factories £359 6s. 8d., and paper and printing works £359 8s. 8d. per male worker. The average amounts paid to women and girls in the principal industries in which they were employed were as follow: food and drink factories, £174 1s. 9d., textile factories, £171 4s. 7d., clothing factories, £166 18s. 11d., printing and bookbinding trades, £165 0s. 2d. per female worker.

The wages paid to factory workers are for the most part subject to regulation by industrial awards and agreements. This matter is discussed in greater detail in the chapters "Employment", "Industrial Arbitration", and "Wages" of this Year Book.

#### MOTIVE POWER.

To avoid duplication, statistics of motive power available for use in manufacturing have been compiled covering total horse-power of engines and electric motors installed (*a*) in factories engaged in manufacturing processes, and (*b*) in electricity generating stations. Certain establishments which generated electricity for their own use furnished a separate return of the generation of electricity prior to 1936-37; in that and later years, particulars of the generation of electricity have been included in the return covering the general operations of the establishment. The effect of this change was to increase (by approximately 50,000 h.p. in 1936-37) the horse-power of prime movers, principally steam, in factories and reduce by an equivalent amount the horse-power of engines in electricity generating stations.

Prior to 1936-37 occupiers of factories were asked to state in their annual returns (1) the full capacity of their machinery, and (2) the average horse-power in use during the period of operation. Since 1936-37 the details have been collected on a slightly different basis, viz. (1) the horse-power of machinery ordinarily in use, and (2) the horse-power of machinery in reserve or idle.

The number of factories (other than electricity generating stations) in which power-driven machinery was used is shown in the following table, together with the full capacity of engines and electric motors installed. The horse-power is the combined total of engines and electric motors ordinarily in use and in reserve or idle, and represents the total power available for manufacturing purposes, whether actually in use or not; obsolete engines are excluded.

TABLE 571.—Horse-power of Engines in Factories, 1911 to 1945-46.

(Excluding electricity generating stations.)

Year.	Establishments using Manual Labour only.	Establishments using Power Driven Machinery.	Horse-power of Engines Installed.					
			Steam.	Gas.	Electricity.	Water.	Oil.	Total.
	No.	No.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
1911	1,489	3,446	79,807	14,728	27,466	92	1,307	123,400
1920-21	835	4,885	129,894	15,345	149,870	38	1,805	296,952
1928-29	805	7,534	128,252	10,632	321,237	314	9,646	470,081
1930-31	418	7,000	116,373	7,625	335,223	95	13,700	473,016
1931-32	358	6,921	139,061	8,024	359,452	429	16,087	523,053
1935-36	425	7,937	142,127	5,968	457,910	62	16,128	622,195
1936-37	390	8,230	197,972*	6,576	485,444	258	19,049	709,299
1938-39	443	8,915	209,697	5,692	601,999	398	20,541	838,327
1939-40	336	8,023	187,601	5,548	658,418	109	20,478	872,154
1940-41	362	9,462	198,478	4,835	710,634	68	22,185	936,200
1941-42	409	9,661	203,428	5,430	755,969	53	23,408	988,288
1942-43	298	9,716	209,179	4,965	807,567	195	24,229	1,046,135
1943-44	310	10,343	203,933	4,266	832,486	183	25,708	1,068,576
1944-45	306	10,951	208,366	4,283	865,669	171	27,406	1,100,895
1945-46	271	11,916	200,272	4,279	912,319	141	29,006	1,146,017

\*See text above table.

In factories (other than electricity generating stations) using power-driven machinery, the average horse-power installed per establishment increased from 36 in 1911, 66 in 1920-21, and 68 in 1930-31, to 94 in 1938-39 and 96 in 1945-46. In 1945-46 only 2.2 per cent. of the establishments operated without the use of power-driven machinery.

A further analysis of the power of engines installed in factories (excluding electricity generating stations) in the years 1938-39, 1944-45, and 1945-46 is shown below:—

TABLE 572.—Horse-power of Engines in Factories, 1938-39 to 1945-46.

(Excluding electricity generating stations.)

Class of Engine.	1938-39.		1944-45.		1945-46.	
	Ordinarily in Use.	In Reserve or Idle.	Ordinarily in Use.	In Reserve or Idle.	Ordinarily in Use.	In Reserve or Idle.
Steam—	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
Reciprocating ... ..	129,197	18,740	107,593	24,600	104,638	27,176
Turbine ... ..	49,721	12,039	58,722	12,451	56,812	11,646
Internal Combustion—						
Gas ... ..	4,912	780	3,563	720	3,221	1,058
Petrol or other Light Oils ... ..	3,267	415	6,099	939	6,489	2,821
Heavy Oils ... ..	15,420	1,439	14,503	5,865	14,057	5,639
Water ... ..	398	...	171	...	141	...
Total Prime Movers ... ..	202,915	33,413	190,651	44,575	185,358	48,340
Electric Motors—						
Driven by purchased Electricity ... ..	475,506	34,291	737,444	42,028	766,967	55,302
Driven by Electricity generated in Own Works ... ..	85,180	7,022	77,771	7,826	81,674	8,376
Total Electric Motors ... ..	560,686	41,313	815,215	50,454	848,641	63,678
Total Power installed ... ..	763,601	74,726	1,005,866	95,029	1,033,999	112,018

The horse-power of engines installed in factories other than electricity generating stations increased about 37 per cent. between 1938-39 and 1945-46. In the latter year, nearly 80 per cent. of the horse-power of

engines in these factories was electrical, compared with about 72 per cent. before the war. Over the same period, steam horse-power decreased from nearly 25 per cent. to about 17.5 per cent. of the total.

*Motive Power in Electricity Generating Stations.*

Particulars of the horse-power of the various types of prime movers installed in electricity generating stations, together with the units of electricity generated, are shown in the following table:—

TABLE 573.—Engines in Electric Generating Stations, 1911 to 1945-46.

Year.	Horse-power of Engines Installed.					Electricity Generated.
	Steam.	Gas.	Water.	Oil.	Total.	
	h.p.	h.p.	h.p.	h.p.	h.p.	000 units.
1911 ...	87,173	1,610	280	92	89,155	135,337
1920-21 ...	189,670	3,727	.....	1,227	194,624	342,536
1928-29 ...	520,033	8,229	19,250	10,619	558,131	959,985
1930-31 ...	812,001	6,606	18,940	18,301	855,848	1,059,829
1931-32 ...	790,932	6,339	20,280	42,078	859,629	1,075,706
1938-39 ...	848,895	5,250	41,540	57,802	953,487	1,948,489
1939-40 ...	948,455	5,200	41,160	62,855	1,057,670	2,145,447
1940-41 ...	1,005,008	4,702	41,270	65,641	1,116,621	2,405,118
1941-42 ...	1,001,938	4,771	41,270	68,670	1,116,649	2,656,244
1942-43 ...	1,065,962	4,422	36,860	60,111	1,167,355	2,844,180
1943-44 ...	1,083,881	4,547	37,610	72,498	1,198,536	2,826,131
1944-45 ...	1,086,441	4,762	37,610	71,927	1,200,740	2,877,336
1945-46 ...	1,091,562	3,839	37,500	70,193	1,203,094	2,831,801

Further details of electricity generating stations are shown in Table 615.

FUEL CONSUMED.

The value of fuel consumed and water and lubricating oil used in the manufacturing industries in 1945-46 amounted to £12,206,641. This sum includes fuels of various types valued at £11,282,725, as shown below, and water and lubricating oil valued at £923,916.

TABLE 574.—Value of Factory Fuel Consumed, 1945-46.

Class of Industry.	Coal.	Coke.	Wood.	Fuel Oil.	Electricity.	Gas.	Other (Incl. Tar Fuel).	Total.
	£	£	£	£	£	£	£	£
Treatment of Non-Metalliferous Mine and Quarry Products ...	129,726	13,349	4,062	2,765	132,854	33,689	7,375	323,826
Brick, Pottery, Glass ...	318,412	1,812	23,439	144,612	70,221	75,733	6,240	640,469
Chemical, Paint, Oil, Grease ...	193,579	23,177	9,464	76,135	196,843	16,473	12,580	528,251
Industrial Metals, Machines, Conveyances	394,333	1,642,665	8,997	294,369	1,267,408	536,940	102,223	4,246,935
Textiles and Textile Goods (not Dress) ...	67,740	1,666	4,639	2,824	152,816	2,652	3,780	236,117
Skins, Leather (not Clothing or Footwear) ...	52,574	3,848	880	736	45,761	1,221	111	105,131
Clothing ...	32,226	11,225	3,634	4,552	111,158	14,154	3,994	180,943
Food, Drink, Tobacco ...	438,044	55,272	155,770	111,090	560,652	78,813	9,004	1,408,645
Woodworking, Basketware ...	36,358	2,304	10,796	22,532	119,052	1,623	1,337	194,002
Furniture, Bedding ...	1,423	544	563	76	28,129	1,545	969	33,249
Paper, Printing ...	82,568	1,378	510	11,854	90,183	14,978	624	202,095
Rubber ...	34,123	2,685	1,761	2,733	92,486	1,234	...	135,022
Heat, Light, Power	2,175,670	284,878	13,796	368,682	15,098	51,754	51,012	2,960,890
Other ...	15,276	1,175	906	1,874	57,190	9,111	1,624	87,156
Total ...	3,972,052	2,045,978	239,217	1,044,834	2,939,851	839,920	200,873	11,282,725

More than half the coal used as fuel in factories is for the generation of electricity; large quantities are used also in metal and machinery works and in food and drink factories. The coke is used for the most part in smelting. Most of the firewood is used in bakeries and butter factories, and of the oil in metal and machinery works, electricity works, glassworks, and food and drink factories. Large quantities of coke oven gas and blast furnace gas are used in the iron and steel works at Newcastle and Port Kembla. The principal users of electricity are metal and machinery works, food and drink factories, and manufacturers of textiles, clothing, and chemicals.

The quantities of coal, coke and fuel oil used in the various classes of industry during the years 1938-39, 1944-45, and 1945-46 are shown in the following table, together with the quantity of coal used as raw material in coke and gas works:—

TABLE 575.—Coal, Coke, and Oil Used in Factories, 1938-39 to 1945-46.

Class of Industry.	1938-39.			1944-45.			1945-46.		
	Coal.	Coke.	Oil.	Coal.	Coke.	Oil.	Coal.	Coke.	Oil.
	000 tons.	000 tons.	000 gall.	000 tons.	000 tons.	000 gall.	000 tons.	000 tons.	000 gall.
<b>Fuel—</b>									
Non-metalliferous Mine and Quarry Products...	235	24	127	168	29	26	168	26	40
Bricks, Pottery, Glass ...	301	3	1,802	166	1	3,208	215	1	3,381
Chemicals, Paint, Oil ...	60	8	820	114	16	1,934	106	17	2,260
Metals, Machines, Conveyances ...	400	1,142	7,338	423	1,164	7,450	319	852	6,974
Textiles, Skins, Leather, Clothing ...	65	3	799	97	8	458	93	10	173
Food, Drink, Tobacco ...	215	28	2,220	280	28	2,000	260	34	2,111
Wood, Furniture ...	6	...	146	25	2	255	23	1	264
Paper, Printing ...	36	...	191	51	1	92	47	1	251
Rubber ...	19	1	28	23	1	36	22	1	55
Heat, Light and Power ...	1,165	133	10,735	1,675	221	6,965	1,696	235	7,947
Other ...	8	2	12	9	2	25	10	3	37
<b>Total used as Fuel ...</b>	<b>2,510</b>	<b>1,344</b>	<b>24,216</b>	<b>3,031</b>	<b>1,473</b>	<b>22,449</b>	<b>2,959</b>	<b>1,181</b>	<b>23,511</b>
<b>Raw Materials—</b>									
Coke Works ...	1,662	...	...	1,748	...	...	1,456	...	...
Gas Works ...	578	...	*	772	...	*	796	...	*
<b>Total (Fuel and Raw Materials) ...</b>	<b>4,750</b>	<b>1,344</b>	<b>*</b>	<b>5,551</b>	<b>1,473</b>	<b>*</b>	<b>5,211</b>	<b>1,181</b>	<b>*</b>

\* Not available for publication.



A comparative statement of the total quantities of coal used as raw material and fuel, and of coke, wood and oil used as fuel in the factories in 1945-46 and earlier years is shown below:—

TABLE 576.—Coal, Oil, etc. Used in Factories, 1935-36 to 1945-46.

Year.	Coal.		Coke as fuel.	Wood as fuel.	Oil as fuel.
	Fuel.	Raw material, coke and gas works.			
	tons.	tons.	tons.	tons.	gallons.
1935-36 ... ..	2,098,214	1,818,743	1,633,686	131,501	21,840,147
1936-37 ... ..	2,312,983	1,961,782	1,138,847	139,888	22,548,275
1937-38 ... ..	2,488,672	2,113,720	1,161,165	163,694	22,841,255
1938-39 ... ..	2,509,664	2,239,978	1,344,208	172,963	24,215,828
1939-40 ... ..	2,419,416	2,454,807	1,472,155	185,674	21,454,222
1940-41 ... ..	2,684,356	2,987,969	1,703,676	211,442	28,320,626
1941-42 ... ..	3,006,732	3,158,718	1,697,836	208,469	30,238,453
1942-43 ... ..	3,037,445	3,025,772	1,671,112	165,893	23,400,387
1943-44 ... ..	3,036,600	2,896,270	1,599,071	169,482	22,718,098
1944-45 ... ..	3,031,800	2,520,069	1,473,041	169,754	22,448,989
1945-46 ... ..	2,959,244	2,252,343	1,180,805	176,962	23,511,329

NOTE.—In 1945-46, 15,407,405 gallons of fuel tar were used; quantities in previous years are not available.

Coal used in factories of New South Wales increased from 4,749,642 tons in 1938-39 to 6,165,450 tons in 1941-42 and then decreased to 5,581,869 tons in 1945-46, due in large part to the inadequacy of supplies. After increasing in the early war years, the consumption of other fuels shown declined and in 1945-46 was much the same as in 1938-39.

# VALUE OF MATERIALS, ETC. USED AND OF PRODUCTION.

The following statement shows the value of output and the value of production of the manufacturing industries in 1945-46 and various earlier years, together with the amount of salaries and wages paid and the value of materials, fuel, etc. used. The bases of the values shown and certain changes in statistical practice which affect the comparisons are explained on page 607 of this volume.

TABLE 577.—Value of Factory Output and Production, 1911 to 1945-46.

Year.	Salaries and Wages Paid (exclusive of drawings of working proprietors).	Value of Materials, Containers, etc. used.	Value of Fuel Consumed.	Balance (i.e., Other expenses, profit, etc.)	Value of Factory Output.	Value of Production (Value added in manufacture).	Average Value of Production per Employee†
	£000	£000	£000	£000	£000	£000	£
1911 ... ..	10,048	33,671	1,243	9,384	54,346	19,432	185.9
1920-21 ... ..	25,619	91,104	3,609	17,509	137,841	43,128	309.8
1928-29 ... ..	38,544	105,357	6,314	35,083	185,298	73,627	407.3
1930-31 ... ..	25,200	64,579	4,381	24,324	118,484	49,524	388.1
1931-32 ... ..	22,751	63,557	4,229	23,002	114,439	46,653	369.2
1935-36 ... ..	33,315	98,950	6,274	36,155	174,694	69,470	359.6
1938-39 ... ..	44,606	120,502	7,651	45,660	218,419	90,266	394.5
1939-40 ... ..	47,693	134,454	8,135	48,916	239,198	96,609	407.7
1940-41 ... ..	57,760	161,253	9,620	57,284	285,917	115,044	432.9
1941-42 ... ..	75,758	189,469	11,229	63,032	339,488	138,790	465.4
1942-43 ... ..	88,900	207,599	12,308	64,682	373,489	153,582	486.7
1943-44 ... ..	93,518	223,604	12,808	60,208	399,138	162,726	503.7
1944-45 ... ..	89,243	215,219	12,565	70,632	387,659	159,875	508.1
1945-46 ... ..	87,647	201,706	12,207	65,532	367,092	153,179	508.1

† Based on average number of employees over full year.

The value of materials used in 1945-46 was £210,706,086, including containers and packing £10,617,359, and tools replaced and repairs to plant £7,317,293.

On the average, out of every hundred pounds worth of goods produced in factories in 1945-46, the materials, containers, and fuel cost £58 6s., and the employees received £23 18s., leaving a balance of £17 16s. The balance is in general the proportion which accrues to the proprietors for their own work in the factories, and for overhead expenses, including depreciation, taxation, workers' compensation, etc., and profit. In some cases the value of the output as recorded represents the value at which the products are passed from the factories to the sales departments (see page 607).

The following table shows separately the proportions of the items which made up the total recorded value of output of all factories and of private establishments only. The latter comparison is the more satisfactory, because the nature of the work undertaken in Government workshops differs greatly from that of the private establishments and the value of much of the output of Government workshops has been estimated (see page 607).

TABLE 578.—Analysis of the Value of Factory Output, 1920-21 to 1945-46.

Year.	All Establishments.				Private Establishments Only.			
	Proportion per cent. of Total Value of Output absorbed by—			Total.	Proportion per cent. of Total Value of Output absorbed by—			Total.
	Materials and Fuel.	Salaries and Wages.	Overhead Charges, Profit, etc.		Materials and Fuel.	Salaries and Wages.	Overhead Charges, Profit, etc.	
1920-21	68.7	18.6	12.7	100	70.4	16.4	13.2	100
1928-29	60.3	20.8	18.9	100	61.8	19.2	19.0	100
1930-31	58.2	21.3	20.5	100	60.0	19.4	20.6	100
1931-32	59.2	19.9	20.9	100	61.4	18.2	20.4	100
1935-36	60.2	19.1	20.7	100	61.1	18.0	20.9	100
1938-39	58.7	20.4	20.9	100	59.5	19.4	21.1	100
1939-40	59.6	19.9	20.5	100	60.6	18.8	20.6	100
1940-41	59.8	20.2	20.0	100	60.9	18.9	20.2	100
1941-42	59.1	22.3	18.6	100	60.5	20.7	18.8	100
1942-43	58.9	23.8	17.3	100	60.4	21.9	17.7	100
1943-44	59.2	23.4	17.4	100	60.7	21.5	17.8	100
1944-45	58.7	23.0	18.3	100	60.1	21.3	18.6	100
1945-46	58.3	23.9	17.8	100	59.3	22.6	18.1	100

In private establishments, the proportion absorbed by materials and fuel, was approximately 60.4 per cent. during the last ten years but fell to 59.3 per cent. in 1945-46. The proportion of salaries and wages rose from 18.0 per cent. in 1935-36 to 22.6 per cent. in 1945-46 and averaged 20.2 per cent. over the period. Overhead charges, etc., and profit absorbed an average of 19.4 per cent. over the same period, the proportion falling from 20.9 to 18.1 per cent.

The ratio of the total amount of salaries and wages paid to the recorded value of production was about 50 per cent. in the pre-war years; it rose significantly during the war and was 57.2 per cent. in 1945-46. The ratio varies widely from industry to industry, and in a number of them was lower in 1945-46 than in 1938-39, as shown in the following table:—

TABLE 579.—Ratio of Wages to Value of Production, 1938-39 to 1945-46.

Class of Industry.	Ratio of Amount of Wages Paid to Value of Production.					
	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
Treatment of Non-metalliferous Mine and Quarry Products ... ..	45.8	44.3	48.1	48.8	51.5	56.8
Bricks, Pottery, Glass ... ..	58.8	64.3	67.7	66.7	66.5	66.9
Chemicals, Paint, Oil, Grease ... ..	26.5	28.3	32.4	34.7	34.2	34.9
Industrial Metals, Machines, Conveyances ... ..	58.4	66.8	69.4	68.1	66.1	67.9
Precious Metals, Jewellery ... ..	61.0	55.9	54.2	51.4	55.1	60.3
Textiles and Textile Goods (not Dress)... ..	59.0	55.4	56.4	55.5	54.6	57.5
Skins, Leather (not Clothing or Footwear) ... ..	64.2	61.5	60.9	60.6	61.9	60.9
Clothing ... ..	62.9	61.0	61.1	59.9	59.0	60.7
Food, Drink, Tobacco ... ..	34.3	35.5	39.2	40.7	39.9	43.2
Woodworking, Basketware ... ..	60.6	60.9	62.3	62.1	61.5	62.2
Furniture, Bedding ... ..	64.6	62.7	60.8	58.0	59.8	63.2
Paper, Printing ... ..	54.0	53.2	52.2	50.5	50.3	57.7
Rubber ... ..	76.8	72.3	74.5	74.8	81.7	79.1
Musical Instruments ... ..	61.3	65.1	58.5	59.3	59.4	61.5
Miscellaneous Products ... ..	54.5	53.9	63.1	58.6	60.4	57.1
Heat, Light, Power ... ..	16.8	17.1	18.6	19.5	19.5	20.9
Total ... ..	49.4	54.6	57.9	57.5	55.8	57.2

#### PRINCIPAL FACTORY PRODUCTS.

Information relating to the principal articles manufactured in New South Wales in the years 1938-39 to 1945-46 is summarised in the following table. In this table the production shown is the *total recorded production* of each article classified according to its appropriate industry, even though in some cases portion of the total output may have been a by-product of establishments classified in other industry groups. For example, the total output of coke is shown in Class I, which relates to the treatment of non-metalliferous mine and quarry products, although coke is produced in both coke works (in Class I) and gas works (in Class XVI).

Certain of the principal articles in the table are listed in italics to distinguish them as items for which details of production during years prior to 1936-37 are available. Information in respect of the remainder of the items listed is available only for years subsequent to 1936-37.

In a number of cases, items have been marked "not available for publication", either because the commodity was produced in only one or two factories and could not be published because of the secrecy provisions of the Census Act, 1901 or because the measure of quantity or value was incomplete or meaningless.

TABLE 580.—Principal Articles Manufactured in N.S.W., 1938-39 to 1945-46.

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
£							
CLASS I.—Treatment of Non-metalliferous Mine and Quarry Products.							
Coke ... ..	tons	1,548,521	1,639,684	1,709,853	2,858,994	1,470,149	2,505,761
Coke Breeze ... ..	"	80,482	34,855	102,402	47,071	78,470	36,699
Tar—							
Crude ... ..	gals.	24,310,282	255,666	19,837,201	182,188	18,230,200	169,874
Refined ... ..	"	2,988,064	47,506	11,590,233	139,789	12,785,206	169,431
Cement, Portland ... ..	tons	432,487	1,447,542	327,830	980,215	320,556	962,231
Cement Pipes ... ..	"	...	251,210	...	236,880	...	248,026
Cement Building							
Sheets ... ..	sq. yds.	5,290,851	420,956	6,533,681	627,262	7,805,432	764,842
Fibrous Plaster							
Sheets ... ..	"	2,671,076	239,631	494,117	71,765	1,632,041	249,496
Building and Roofing Material with Paper or Felt Base ... ..	sq. yds.	1,455,959	55,105	*	*	1,468,115	98,065
Lime—							
Quick ... ..	tons	29,690	69,308	11,162	28,968	17,533	49,233
Hydrated ... ..	"	10,731	35,597	7,141	27,185	7,638	28,565
Agricultural ... ..	"	5,629	7,468	4,246	5,387	4,985	5,303
£							
CLASS II.—Bricks, Pottery, Glass, etc.							
Bricks, Building ... ..	1,000	379,236	1,265,555	72,800	325,454	144,594	695,097
Fire Bricks and Blocks ... ..	"	19,070	310,895	20,652	551,093	18,732	490,896
Floor and Wall Tiles ... ..	sq. yds.	82,154	39,468	*	*	19,923	10,265
Roofing Tiles ... ..	1,000	20,129	305,980	3,297	51,099	12,230	215,969
Earthenware Pipes ... ..	"	...	402,613	...	106,837	...	236,907
Pottery ... ..	"	...	15,865	...	73,479	...	80,807
Terra Cotta ... ..	"	...	51,535	...	15,612	...	20,120
Sanitary Earthenware ... ..	"	...	109,400	...	81,194	...	*
Domestic and other Earthenware ... ..	"	...	44,667	...	74,201	...	58,311
Glass Bottles ... ..	"	...	736,925	...	1,396,681	...	1,393,327
£							
CLASS III.—Chemicals, Dyes, Paint, Oils, etc.							
Cosmetic Creams and Lotions ... ..	"	...	133,366	...	490,141	...	481,650
Pharmaceutical Products ... ..	"	...	2,204,682	...	3,499,396	...	2,991,997
Tooth Paste and Powder ... ..	"	...	276,946	...	388,414	...	616,447
Disinfectants ... ..	"	...	90,134	...	142,315	...	215,724
Insecticides ... ..	"	...	144,732	...	370,852	...	320,232
Sprays, Vermin ... ..	"	...	37,956	...	86,210	...	49,198
Weed-killers ... ..	"	...	10,764	...	17,499	...	*
Toilet Lanoline ... ..	lb.	12,434	2,114	23,360	1,887	52,705	13,461
Water Paints ... ..	"	4,307,304	80,160	3,842,819	138,999	3,454,443	71,869
Oil Paint, Ready Mixed and other							
Colours—							
Dry ... ..	lb.	6,035,807	62,117	6,548,828	93,089	6,729,218	131,210
Ground in Oil ... ..	"	...	...	1,295,474	66,155	991,081	53,456
Varnishes ... ..	gall.	416,331	173,316	436,668	231,606	382,732	221,751
Kalsomine ... ..	lb.	4,046,276	61,484	2,864,309	45,546	3,872,704	67,027
Lacquer—							
Clear ... ..	gall.	56,139	39,169	77,648	55,474	80,125	55,688
Colours ... ..	"	316,357	245,197	371,833	327,633	360,504	350,074
Thinners ... ..	"	300,964	93,155	435,129	201,150	454,048	198,860
Enamels ... ..	"	147,520	150,249	136,158	134,228	259,463	275,373
Stains, Oil ... ..	"	85,131	47,524	72,934	29,900	101,768	50,157
Whitelead ... ..	cwt.	53,129	109,252	81,920	203,036	*	*
Zinc Oxide ... ..	"	111,376	158,577	94,056	179,901	92,959	166,801
Zinc Oxide Paste ... ..	"	18,141	51,431	4,509	14,349	6,718	20,547
Paint and Varnish Removers ... ..	gall.	7,922	4,297	113,367	54,398	41,135	25,528
Putty ... ..	cwt.	20,789	22,488	18,537	37,993	23,604	46,218
Synthetic Finishes—							
Clear ... ..	gall.	19,173	15,033	3,521	3,284	9,479	9,603
Colours ... ..	"	323,721	338,731	246,193	215,616	329,712	414,631
Thinners ... ..	"	*	*	41,795	10,857	42,141	11,236

\* Not available for publication.

TABLE 580.—Principal Articles Manufactured in N.S.W.,  
1938-39 to 1945-46—continued.

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
		£		£		£	
CLASS III.—Chemicals, Dyes, Paints, Oils, etc.—continued.							
Rubbing Compounds	lb.	264,395	11,503	37,296	1,379	90,570	4,751
Plastic Woods ...	"	15,342	1,708	12,605	1,297	22,886	2,232
Oil—							
Linseed ...	gall.	2,153,127	409,916	2,419,704	955,854	3,288,093	1,311,973
Neatsfoot ...	"	40,107	7,427	44,028	11,658	67,362	14,131
Coconut ...	tons	13,864	306,889	8,415	494,639	8,160	453,820
Peanut ...	"	1,751	77,658	3,238	303,610	2,393	235,890
Coconut Cake and Meal ...	"	8,353	50,483	5,390	33,093	4,943	24,846
Linseed Cake and Meal ...	"	14,650	148,859	15,091	148,283	23,313	214,076
Peanut Meal ...	"	*	*	4,304	27,762	3,549	24,490
Grease ...	lb.	6,338,279	56,379	9,906,865	221,478	8,058,677	194,408
Tallow, Raw	cwt.	269,982	237,055	325,205	434,816	340,442	501,532
Glue Pieces and Sinews ...	"	163,421	21,206	217,410	26,978	174,671	22,930
Glue ...	"	11,720	25,404	8,364	22,455	*	*
Soap—							
Household ...	"	321,957	567,303	297,513	588,071	263,556	527,388
Toilet ...	"	107,390	531,015	179,766	997,975	196,943	1,097,960
Sand ...	"	42,718	63,208	27,528	35,854	30,395	38,701
Soft and Other	"	15,627	17,941	39,289	53,829	41,812	58,979
Total Soap	"	487,692	1,179,467	544,096	1,675,729	532,706	1,725,628
Soap Extracts and Powders ...	"	60,102	102,769	239,779	679,635	265,764	782,773
Cleansers and Cleansing Powders ...	"	28,502	76,025	50,691	124,690	48,786	115,044
Candles ...	"	*	*	4,231	17,180	5,256	20,859
Soda Crystals	"	48,893	16,964	36,401	16,826	36,896	17,402
Talcum and Face Powder ...	"	*	*	*	207,198	27,472	533,525
Stearine ...	"	29,291	28,794	60,719	99,828	46,737	90,600
Manures ...	"	767,854	268,778	804,512	380,834	749,130	381,105
Sulphate of Ammonia	tons	20,960	192,639	20,215	201,383	19,377	191,392
Sulphuric Acid ...	"	57,011	235,077	46,981	258,686	50,339	294,551
Printing Ink ...	"	...	188,654	...	244,152	...	292,737
Writing Ink ...	"	...	28,328	...	79,370	...	50,735
Polish—							
Auto ...	"	...	13,870	...	7,531	...	11,672
Floor ...	"	...	103,442	...	179,681	...	185,882
Brass ...	"	...	78,426	...	*	...	*
Furniture ...	"	...	*	...	1,303	...	1,475
Boot and Shoe ...	"	...	21,023	...	43,453	...	52,624
Stove ...	"	...	61,431	...	62,174	...	54,422
Paste ...	"	...	19,599	...	5,705	...	5,158
Mucilage ...	"	...	9,903	...	6,678	...	8,413
Other Adhesives—							
Powder ...	cwt.	*	*	5,514	19,866	6,125	22,283
Liquid ...	"	*	*	22,521	47,798	25,242	66,713
CLASS IV.—Industrial Metals, Machines, Implements and Conveyances.							
Pig Iron ...	tons	1,104,605	2,664,276	1,117,709	4,842,923	852,197	3,403,147
Steel Ingots ...	"	1,169,249	4,213,220	1,345,626	8,032,846	1,054,483	6,386,858
Rails, Bars, Sections	"	972,799	*	1,089,509	14,117,999	853,431	11,141,292
Steam Engine Boilers ...	No.	58	8,760	112	15,271	228	32,685
Internal Combustion Engines—Petrol	"	1,214	54,430	6,216	255,519	6,306	275,547
Marine —Engines	"	967	30,235	938	33,106	897	44,332
Fabricated Structural Steel ...	tons	49,956	1,368,569	57,255	2,110,724	54,331	2,022,872
Machinery—							
Mining and Ex-	"	...	198,206	...	1,365,360	...	693,344
cavating ...	"	...	...	...	...	...	...

\* Not available for publication.

TABLE 580.—Principal Articles Manufactured in N.S.W.,  
1938-39 to 1945-46—*continued*.

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
£							
CLASS IV.—Industrial Metals, Machines, Implements and Conveyances—continued.							
Machinery—contd.							
Weighing Appliances ...	...	...	42,188	...	78,031	...	82,285
Laundry (other than Household) ...	...	...	39,973	...	72,555	...	96,660
Metalworking ...	...	...	184,594	...	913,132	...	735,705
Refrigerating (not Household) ...	...	...	336,028	...	608,160	...	411,498
Woodworking ...	...	...	46,271	...	230,333	...	113,592
Printing ...	...	...	10,879	...	9,782	...	16,966
Textile ...	...	...	10,793	...	36,531	...	56,344
Machine Tools ...	...	...	*	...	855,151	...	369,998
Refrigerators (Household) ...	No.	13,102	509,863	10,947	437,580	18,748	698,226
Furniture of Iron and Steel ...	...	...	85,232	...	412,289	...	333,274
Metal Window Frames ...	...	...	80,155	...	54,716	...	57,452
Lawnmowers ...	No.	19,958	36,595	*	*	2,255	11,131
Bolts and Nuts ...	...	...	266,753	...	537,198	...	425,075
Screws ...	...	...	5,837	...	64,770	...	86,353
Washers ...	...	...	8,221	...	35,439	...	13,562
Railway and Deck Spikes ...	tons	269	5,642	218	8,680	*	*
Springs, Automobile and other ...	...	...	248,244	...	197,297	...	199,214
Axles, Automobiles ...	No.	*	*	24,142	35,063	3,606	8,960
Spades and Shovels ...	"	104,911	17,733	210,429	45,375	144,768	36,280
Aluminium Utensils ...	...	...	137,040	...	25,380	...	81,559
Non-ferrous Alloy, Steam, Gas and Water Fittings ...	...	...	151,282	...	264,424	...	230,274
Non-ferrous Alloy Window and Door Fittings ...	...	...	31,525	...	161,927	...	46,449
Milk and Cream Cans ...	No.	12,492	16,160	26,505	41,025	*	*
Packers' Cans ...	...	...	1,485,909	...	3,340,424	...	3,172,207
Household Utensils of Sheet Iron and Steel ...	...	...	194,584	...	686,668	...	393,423
Ploughs ...	No.	778	*	1,152	*	729	*
Cultivators ...	"	985	*	2,938	*	3,129	*
Dairy and Butter-making Machinery ...	...	...	14,403	...	8,147	...	14,704
Milking Machine Parts ...	...	...	3,593	...	45,240	...	52,748
Railway Cars and Wagons ...	No.	744	406,790	*	*	1,496	*
Stoves—							
Wood, Coal and Coke Burning ...	"	17,154	87,786	12,549	109,157	10,154	62,745
Gas ...	...	17,736	181,309	8,401	113,414	8,507	123,243
Electric ...	...	4,930	75,532	1,758	38,781	5,069	62,463
Other Heating ...	...	8,268	34,239	33,779	74,600	25,312	90,647
Wire ...	tons	82,294	1,420,332	97,755	2,343,471	62,794	1,625,004
Wire Gates ...	...	...	79,002	...	37,561	...	53,483
Nails ...	tons	6,163	157,195	9,809	268,720	5,036	139,815
Pipes — Wrought, Welded, Black and Galvanised ...	"	53,393	1,158,420	83,736	2,380,434	*	2,148,995
Pipe Fittings ...	...	...	313,421	...	766,036	...	730,545
Motor Chassis Assembled—							
Imported Car ...	No.	19,701	*	322	*	272	*
Imported Truck ...	"	4,842	*	5,088	*	3,529	*
Motor Bodies Made—							
Car ...	"	870	49,272	*	*	3	730

\* Not available for publication.

TABLE 580—Principal Articles Manufactured in N.S.W.,  
1938-39 to 1945-46—*continued*.

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
£							

\* Not available for publication.

TABLE 580—Principal Articles Manufactured in N.S.W.,  
1938-39 to 1945-46—*continued*.

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
		£		£		£	
CLASS VI.—Textiles and Textile Goods.							
Cotton Tweed, Denims and other Goods ...	sq. yds.	1,898,920	244,667	12,791,137	2,059,669	8,778,988	1,520,719
Wool Tops and Noils	lb.	7,045,824	726,784	6,503,162	1,092,293	5,121,227	927,322
Cloth, Woollen and Worsted—							
Woollen Cloth and Tweed ...	sq. yds.	1,681,664	215,226	1,938,122	454,394	12,620,939	3,603,029
Worsted Cloth and Serge ...	"	10,692,085	2,135,766	12,214,165	3,360,904		
Total Cloth, Woollen and Worsted ...	"	12,373,749	2,341,092	14,152,297	3,815,298		
Flannel ...	"	575,359	54,197	573,510	82,181	634,761	95,087
Blankets ...	pair	106,447	113,668	159,367	256,417	107,198	197,511
Stockings and Socks—							
Men's—							
Wholly of Wool	doz. pr.	47,762	80,722	365,371	431,991	237,219	275,103
Wholly of Cotton	"	10,217	5,394	12,746	12,504	3,975	3,654
Mixtures of Wool	"	92,403	63,321	*	*	30,239	36,905
Mixtures of other Materials ...	"	38,374	17,391	*	*		
Women's—							
Wholly of Wool	"	19,607	11,381	10,999	7,839	10,077	6,622
Wholly of Silk	"	144,166	161,449	*	*	*	*
Wholly of Rayon	"	55,852	29,682	99,189	179,382	120,213	218,959
Wholly of Cotton	"	9,529	5,779	43,256	57,352	23,143	21,835
Mixtures of Wool	"	10,414	7,923	*	*	111,922	186,154
Rayon Mixtures	"	126,545	73,730	74,916	137,162		
Mixtures of Cotton	"	*	*	*	*		
Silk Mixtures	"	149,572	233,381	*	*	*	*
Children's—							
Wholly of Wool	"	89,772	58,575	71,259	63,054	45,425	49,339
Wholly of other Materials ...	"	3,937	1,997	6,833	3,638	2,481	1,409
Mixtures of Wool	"	52,157	29,971	120,209	66,805	143,682	83,803
Mixtures of other Materials ...	"	198,701	71,535				
Total Stockings and Socks ...	"	1,055,219	804,032	809,458	961,248	728,376	883,873
Knitted Apparel—							
Underwear—							
Wool or containing Wool	doz.	149,591	117,378	131,249	230,181	92,391	147,388
Rayon ...	"	504,341	615,048	416,230	806,765	347,864	742,756
Cotton ...	"	337,123	206,453	469,953	454,061	374,787	380,782
Other ...	"	42,166	21,742	*	*	17,916	20,957
Women's and Girls' Nightwear—							
Rayon ...	"	23,993	57,438	43,764	260,107	46,375	295,815
Other ...	"	6,252	14,117	5,309	45,030	5,216	48,786
Women's and Girls' Costumes, Dresses, or Robes ...	"	9,863	17,755	2,538	38,617	5,934	78,634

\* Not available for publication.



TABLE 580.—Principal Articles Manufactured in N.S.W.,  
1938-39 to 1945-46—*continued*.

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
£							
CLASS VI.—Textiles and Textile Goods.—continued.							
Knitted Apparel— <i>continued</i> .							
Bathing Suits, Trunks, etc.—							
Wool or containing Wool	doz.	51,379	207,752	34,216	161,184	37,979	212,740
Other ...	"	1,674	7,101	2,166	13,350	7,972	20,376
Cardigans, Sweaters, etc.—							
Chest under 34 inches—							
Wool or containing Wool	"	11,104	25,186	28,782	93,588	21,815	71,165
Other ...	"	360	461	2,521	13,181	21,150	43,384
Chest 34 inches and over—							
Wool or containing Wool	"	40,610	198,420	65,944	371,711	30,172	286,047
Cotton ...	"	3,308	9,856	38,581	74,570	52,019	160,829
Other ...	"	8,433	15,661	1,120	18,032	1,107	20,089
Total Knitted Apparel—							
Woolen ...	"	256,110	560,428	262,649	882,085	186,723	783,930
Cotton ...	"	351,409	234,841	515,709	574,145	459,752	630,681
Rayon ...	"	537,042	688,819	464,010	1,119,977	397,871	1,089,775
Other ...	"	45,576	29,337	3,849	4,862	18,251	25,362
Waterproofed Piece Goods ...	sq. yd.	41,367	9,799	235,935	13,775	512,303	152,781
Tarpaulins ...	"	...	92,841	...	290,109	...	220,529
Sails ...	"	...	59,536	...	8,517	...	24,816
Tents ...	"	...	8,795	...	588,620	...	155,046
Flour Bags, Calico...	No.	12,950,583	173,441	1,711,128	34,590	*	*
£							
CLASS VII.—Skins and Leather.							
Scoured Wool ...	lb.	31,246,493†	*	37,294,407†	*	35,808,116†	*
Pelts ...	No.	1,752,626	*	2,891,467	*	2,309,074	*
Leather sold by weight—							
Sole and Belting	lb.	10,369,070	593,827	11,598,603	911,018	11,753,271	905,937
Harness, etc. ...	"	314,180	24,687	727,394	70,341	763,862	70,920
Dressed and Upper from Hides ...	"	436,707	46,296	727,167	60,943	760,105	63,900
Total Sold by Weight	"	11,119,957	664,810	13,053,164	1,042,302	13,277,238	1,040,757
Leather Sold by Area—							
Upholstery ...	sq. ft.	1,828,882	80,586	4,265,319	245,186	3,835,039	212,798
Dressed, and Upper from Hides ...	"	6,099,429	283,308	11,476,958	630,876	11,431,586	636,401
Dressed from Skins—							
Calf ...	"	5,812,393	293,068	4,944,344	336,111	5,112,853	361,860
Goat ...	"	4,136,808	257,457	3,302,123	323,737	3,369,440	322,496
Sheep ...	"	7,793,737	159,885	12,724,548	337,229	11,588,469	319,942
Other ...	"	387,300	25,769	96,976	11,119	394,556	35,861
Total Sold by Area	"	26,058,549	1,100,073	36,810,268	1,884,258	35,731,943	1,889,358
Rough tanned Hides, Splits—							
Dressed ...	sq. ft.	1,224,187	28,374	2,475,125	70,018	2,887,124	82,015
Rough tanned ...	lb.	919,591	17,502	328,601	17,176	260,607	15,642
Basils ...	"	1,386,207	75,442	1,199,262	107,259	896,864	92,286
Horse and Cow Rugs	No.	*	*	1,288	2,655	33,228	47,271
Harness, Single Set	"	347	1,774	428	2,538	468	3,346
Saddles ...	"	3,417	14,179	4,128	30,254	4,072	23,793
Collars (Horse) ...	"	4,860	4,640	5,448	6,961	2,168	2,852
Trunks ...	"	2,444	7,423	2,700	7,852	2,059	7,158
Suitcases and Kit-bags ...	"	545,475	150,069	243,065	164,249	327,187	254,503

\* Not available for publication.

† Exclusive of wool scoured and used for tops and other goods, at woollen mills.

TABLE 580.—Principal Articles Manufactured in N.S.W.,  
1938-39 to 1945-46—*continued*.

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
<div>£</div> <div>CLASS VII.—Skins and Leather—<i>continued.</i></div> <div>£</div>							
Handbags ...	No.	472,343	171,217	626,644	573,879	777,015	872,434
School Bags ...	"	19,807	2,648	88,248	23,399	75,559	18,569
Machine Belting, Leather ...	"	...	73,315	...	145,619	...	134,969
Leather Coats ...	No.	12,029	*	7,000	20,630	13,037	44,849
<div>£</div> <div>CLASS VIII.—Clothing.</div> <div>£</div>							
Made from Woven Piece Goods—Men's and Boys'—	doz.	334,649	*	398,611	*	304,805	*
Shirts ...	"	*	*	*	*	3,517	*
Collars (for sale separately)	"	*	*	*	*	3,517	*
Undershirts, Underpants and Combinations ...	"	144,499	*	186,891	*	134,942	*
Pyjamas ...	"	103,294	*	57,009	*	82,380	*
Handkerchiefs ...	"	806,089	*	545,929	*	547,197	*
Neckties ...	"	280,294	*	109,998	*	130,374	*
Garters and Hose Suspenders ...	"	24,439	10,255	*	*	16,073	8,506
Braces ...	"	48,602	37,594	32,141	46,038	51,608	*
Women's and Girls'—							
Underwear ...	"	316,854	*	251,612	*	251,413	*
Pyjamas and Nightdresses ...	"	51,744	*	63,707	*	49,470	*
Handkerchiefs ...	"	839,349	*	470,697	*	542,093	*
Swimming Suits ...	"	*	*	*	*	4,918	65,437
Corsets ...	"	46,112	316,932	30,856	311,546	32,849	349,087
Corselets ...	"	1,143	21,747	702	71,485	17,891	17,891
Brassieres ...	doz.	35,424	75,401	59,141	197,280	62,349	219,578
Gloves—							
Dress ...	doz. pr.	1,265	6,546	9,087	60,649	10,958	86,934
Working ...	"	33,553	22,179	75,761	117,625	71,485	105,959
Umbrellas ...	No.	202,164	71,911	13,713	7,462	69,156	67,187
Hats—							
Fur Felt ...	doz.	72,271	*	61,678	*	57,802	*
Wool Felt ...	"	62,991	*	70,663	*	60,307	*
Straw—							
Men's and Boys' ...	"	30,311	*	1,763	*	4,834	*
Women's and Girls' ...	"	109,368	*	31,374	*	42,697	*
Other ...	"	43,839	*	81,199	*	59,319	*
Caps ...	"	30,145	*	28,941	*	22,631	*
Total Hats and Caps ...	"	348,925	*	275,618	*	247,590	*
Boots, Leather—							
Men's ...	pair	610,261	310,834	1,154,915	920,945	475,587	387,579
Women's ...	"	2,417	2,228	130	379	1,538	1,336
Children's ...	"	25,606	8,852	17,478	5,961	4,567	2,655
Shoes, Leather—							
Men's ...	"	1,140,741	567,585	1,130,836	800,172	1,368,186	1,068,597
Women's ...	"	1,853,980	1,072,942	2,078,405	1,593,489	2,400,154	1,820,558
Children's ...	"	1,057,618	266,715	1,792,033	537,009	1,888,037	644,806
Other Boots and Shoes ...	"	76,553	22,008	629,709	110,134	36,917	7,669
Slippers, Felt and Fabric—							
Men's ...	"	209,195	27,013	168,776	32,943	218,055	54,814
Women's ...	"	1,520,007	158,076	811,467	150,352	834,643	192,924
Children's ...	"	419,401	21,308	301,063	29,269	501,934	47,572
Slippers, Leather—							
Men's ...	"	232,634	46,629	201,586	67,460	132,301	58,756
Women's ...	"	640,742	89,751	542,254	73,133	349,087	72,863
Children's ...	"	85,127	6,847	141,936	20,648	100,748	14,276
Total Boots, Shoes and Slippers ...	"	7,874,342	2,600,788	8,970,588	4,361,914	8,371,754	4,374,405

\* Not available for publication.

TABLE 580—Principal Articles Manufactured in N.S.W.,  
1938-39 to 1945-46—continued.

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
			£		£		£
CLASS VIII.—Clothing—continued.							
Uppers made for sale	pair	17,133	6,129	34,043	7,968	*	*
Soles made for sale	"	726,544	40,624	2,359,116	199,227	2,209,321	174,557
Heels made for sale	"	*	*	1,565,265	57,814	1,271,506	48,593
Boot and Shoe Accessories	...	...	147,821	...	217,413	...	232,429
CLASS IX.—Food, Drink and Tobacco.							
Flour ... ..	short ton	547,162	3,866,163	516,168	5,348,795	451,895	4,515,622
Bran, Wheaten ...	"	107,779	599,810	99,201	573,879	80,545	464,813
Pollard, Wheaten ...	"	121,164	662,125	111,214	642,634	103,983	604,987
Sharps and Screenings ... ..	"	3,358	27,019	7,007	76,101	5,957	75,552
Wheatmeal ... ..	"	16,119	121,351	52,258	413,271	42,114	390,550
Breakfast Foods—							
Made from Wheat	cwt.	140,645	347,637	171,581	461,538	163,295	425,040
Other ... ..	"	109,904	520,472	120,984	620,173	110,036	582,556
Oatmeal ... ..	"	82,706	167,554	48,816	106,047	123,740	269,225
Cornflour ... ..	"	*	*	125,542	203,142	124,675	228,383
Semolina ... ..	"	38,230	14,801	49,642	32,810	78,025	41,888
Macaroni and Vermicelli ...	"	33,486	52,279	48,391	81,171	49,535	78,771
Rice—							
Dressed ... ..	"	340,476	320,258	512,359	715,136	394,255	519,915
Meal ... ..	"	55,366	12,011	35,948	9,688	21,198	6,023
Flour ... ..	"	27,641	19,048	5,394	4,436	4,344	4,321
Meatmeal ... ..	"	*	*	282,478	134,626	311,622	156,993
Dog Biscuits ... ..	lb.	*	*	2,430,235	29,659	3,000,093	43,273
Biscuits ... ..	"	43,611,260	1,591,740	65,962,969	2,420,548	46,007,436	1,718,100
Ice Cream Cones ...	"	948,195	43,583	1,038,448	67,991	925,512	58,836
Sugar, Raw ... ..	tons	*	*	*	*	*	*
Confectionery—							
Chocolate ... ..	lb.	21,988,214	1,897,797	21,611,524	1,683,222	27,065,828	1,965,700
Other ... ..	"	26,810,961	1,508,044	36,938,327	1,881,847	28,841,865	1,665,419
Cocoa and Chocolate (Potable)	"	945,888	36,823	3,153,412	139,554	3,035,442	151,509
Jams and Preserves—							
Jams, Conserves, Jellies ... ..	"	20,634,787	528,049	43,351,987	1,365,348	45,726,769	1,388,182
Fruit Preserved in Liquid ... ..	"	28,387,122	507,032	13,456,695	387,216	21,762,420	581,618
Vegetables Preserved in Liquid	"	4,902,288	170,092	43,407,345	1,472,918	36,926,172	1,278,471
Dehydrated Vegetables ... ..	"	*	*	6,025,100	724,374	4,140,138	674,063
Total Jams and Preserves ... ..	"	53,924,197	1,205,173	106,241,127	3,949,856	108,554,490	3,922,334
Tomato Pulp ... ..	cwt.	35,490	30,046	33,911	41,922	41,113	54,581
Fruit Pulp ... ..	"	*	*	11,938	14,754	32,929	50,998
Crystallised Fruit ... ..	"	337,489	18,197	529,172	48,395	383,210	29,578
Candied Peel ... ..	"	554,279	14,710	367,872	12,316	*	*
Pickles and Sauces—							
Pickles ... ..	pints	1,939,191	81,703	3,940,704	190,319	4,590,850	214,985
Chutney ... ..	"			1,309,631	68,662	621,823	53,867
Sauce—							
Tomato ... ..	"	3,607,535	157,243	7,867,036	505,525	6,412,787	395,148
Other ... ..	"	3,702,275	214,687	5,212,900	357,446	4,418,866	261,733
Total Pickles and Sauces ... ..	"	9,249,001	453,633	18,330,271	1,121,942	16,044,326	925,733
Soup—							
Tomato ... ..	"	581,656	21,096	935,166	40,552	2,111,235	92,710
Other ... ..	"	565,884	27,785	1,055,142	45,160	1,264,937	55,529
Vinegar ... ..	gall.	1,817,332	52,157	1,771,672	75,441	1,705,488	84,031
Butter ... ..	lb.	113,840,734	7,103,194	71,721,764	5,043,491	74,280,987	5,598,824
Cheese ... ..	"	7,193,022	271,621	4,399,847	219,687	4,857,600	276,814
Bacon and Ham†	"	21,721,914	*	43,846,580	*	37,494,332	*
Lard ... ..	"	662,352	15,678	2,201,494	64,257	1,175,584	31,095

\* Not available for publication. † Exclusive of bacon and ham made from green bacon imported interstate: 4,265,331 lb. in 1938-39, 799,298 lb. in 1944-45, and 1,357,900 lb. in 1945-46.

TABLE 580.—Principal Articles Manufactured in N.S.W.,  
1938-39 to 1945-46—*continued.*

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
£							
CLASS IX.—Food, Drink and Tobacco—continued.							
£							
Milk—							
Condensed ...	lb.	3,815,546	89,013	6,514,023	213,536	5,674,337	169,846
Concentrated ...	"	2,332,097	39,619	18,448,198	328,736	19,510,583	417,926
Powdered and Malted...	"	4,761,437	244,379	10,634,451	615,272	15,130,512	949,052
Preserved Meat ...	"	3,377,960	124,251	27,830,484	1,742,202	26,542,794	1,458,133
Dehydrated Meat ...	"	*	*	2,347,638	308,554	658,124	88,554
Meat Extracts and Pastes ...	"	173,773	23,234	1,035,685	220,071	999,161	197,523
Margarine—							
Table ...	"	4,492,247	162,692	27,179,330	1,435,733	15,167,113	758,896
Other ...	"	22,475,085	566,627	30,834,585	842,900	25,313,121	726,931
Total Margarine	"	26,967,332	729,319	58,013,915	2,278,633	40,480,234	1,485,827
Other Edible Fats (including dripping)							
Coffee ...	"	18,709,985	283,572	23,144,033	710,982	17,379,812	535,782
Pepper ...	"	1,617,370	129,141	2,396,150	263,557	2,396,525	246,792
Spices ...	"	388,505	14,874	198,352	19,070	317,026	29,749
Mustard ...	"	175,632	10,773	116,239	11,087	70,103	7,353
Curry ...	"	600,876	87,935	444,810	61,772	629,257	123,196
Custard Powder ...	"	195,900	10,712	176,085	11,577	183,268	11,868
Saline Powders ...	"	2,019,088	80,293	7,162,002	219,499	4,577,790	159,827
Flavouring Essences	gall.	1,096,636	48,077	*	*	45,722	3,395
Peanut Butter ...	lb.	18,085	32,974	61,716	124,351	45,325	105,080
Icing Sugar ...	"	1,154,457	85,099	2,978,584	204,613	2,496,917	200,251
Starch ...	cwt.	9,077,191	145,481	15,468,971	237,322	17,675,000	280,880
Baking Powder ...	lb.	20,934	27,521	24,223	57,206	17,293	52,524
Self-raising Flour ...	cwt.	1,434,750	101,496	3,077,914	122,779	1,752,766	105,844
Jelly Crystals ...	lb.	249,900	295,589	248,973	338,679	262,951	354,846
Ice ...	tons.	3,060,132	153,967	6,284,044	318,064	7,661,287	409,023
Ice Cream ...	gall.	232,747	438,157	382,103	767,289	425,239	865,743
Aerated Waters, etc.—		2,232,700	773,761	4,686,707	1,209,888	4,874,570	1,257,405
Aerated Waters	gall.	7,101,315	641,884	12,052,565	1,207,437	11,910,572	1,284,277
Syphons ...	"	358,249	46,725	228,780	34,652		
Hop and Ginger Beer ...	"	1,852,504	125,362	677,911	58,786	530,728	50,465
Total Aerated Waters, etc.	"	9,312,068	813,971	12,959,256	1,300,875	12,441,300	1,335,742
Cordials and Syrups	"	423,746	186,747	1,173,823	605,585	2,331,966	948,523
Pure Fruit Juices...	"	53,395	16,226	1,176,429	499,527	362,228	235,219
Ale, Beer and Stout—							
Bulk ...	"	27,174,284	2,213,128	31,799,317	2,573,537	33,032,990	2,667,090
Bottled ...	"	6,724,739	1,252,071	7,234,356	1,315,807	6,040,827	1,093,514
Total Ale and Beer	"	33,899,023	3,465,199	39,033,673	3,889,344	39,073,817	3,760,604
Malt ...	bush.	640,915	211,627	584,599	249,226	555,351	262,186
Tobacco—							
Plug ...	lb.	1,793,705	508,496	2,151,800	808,864	2,469,403	915,221
Flake ...	"	5,272,078	1,971,057	4,914,836	2,005,242	4,803,595	1,969,907
Fine Cut...	"	3,690,037	1,259,151	4,192,019	1,657,984	4,275,328	1,713,304
Total Tobacco	"	10,755,820	3,738,704	11,258,655	4,472,090	11,548,326	4,598,432
Cigarettes ...	"	4,496,428	2,254,936	5,870,132	3,828,185	5,524,816	3,600,766
Sausage Casings—							
Beef ...	cwt.	8,411	11,628	6,788	21,230	7,551	27,062
Mutton and Lamb	"	5,832	82,772	7,645	91,769	6,556	71,956
Pig ...	"	892	11,943	2,345	22,376	713	18,123
CLASS X.—Woodworking and Basketware.							
Rough Sawn Timber—							
Native—							
Hardwoods ...	sup. ft.	129,510,433	*	170,203,823	*	180,024,508	*
Softwoods ...	"	49,840,052	*	75,769,327	*	72,032,499	*
Imported (including Inter-state)—							
Hardwoods ...	"	767,511	*	595,892	*	1,025,681	*

\* Not available for publication.

TABLE 580.—Principal Articles Manufactured in N.S.W.,  
1938-39 to 1945-46—*continued*.

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
£							
CLASS X.—Woodworking and Basketware—continued.							
£							
Rough Sawn Timber—continued.							
Imported (including Interstate)—continued.							
Softwoods ...	sup. ft.	101,051,353	*	768,562	*	1,016,662	*
Total Sawn Timber	"	281,169,349	*	247,337,604	*	254,149,350	*
Hewn Timber—Piles							
Poles, Spars, Logs,							
etc. ...	cub. ft.	133,173	12,405	171,292	8,660	603,500	31,448
Sleepers ...	sup. ft.	652,331	5,601	197,853	3,006	813,149	12,626
Palings ...	"	3,699,186	28,904	3,179,810	30,608	3,769,048	44,988
Pickets ...	"	113,225	1,097	19,259	378	27,797	382
Floorboards—							
Australian Timber	"	28,185,505	327,760	16,444,574	272,483	17,245,671	326,185
Imported Timber	"	2,137,266	41,218	519,331	27,069	411,044	15,398
Weatherboards—							
Australian Timber	"	8,802,107	108,532	3,727,175	65,184	3,911,905	78,574
Imported Timber	"	914,884	17,641	*	*	*	*
Other Dressed Timber Linings, etc.	"	28,863,077	645,285	17,800,006	697,679	20,486,291	891,517
Plywood $\frac{1}{2}$ " basis...	sq. ft.	14,576,406	249,341	15,844,268	301,286	19,544,863	345,856
Veneers ...	"	3,798,634	65,353	10,747,228	86,508	12,431,647	102,289
Joinery ...	"	...	1,441,864	...	2,408,792	...	1,944,363
Casks ...	No.	32,580	...	75,554	112,815	75,604	103,711
Box Shooks ...	"	...	145,939	...	470,786	...	347,109
Boxes, Butter ...	No.	2,536,040	183,618	1,494,699	160,643	1,023,228	104,736
Cases, Fruit ...	"	3,978,313	145,618	2,766,918	178,767	3,017,014	207,010
Other Boxes, Cases, and Crates ...	"	...	514,578	...	2,303,066	...	1,969,734
Axe Handles ...	gross	2,594	7,008	3,761	29,477	5,121	60,372
Other Handles ...	"	25,741	29,024	56,322	98,485	45,422	90,805
Firewood ...	tons	64,145	46,024	145,885	191,383	107,747	153,283
Charcoal ...	"	*	23,509	23,509	152,571	1,036	9,956
Timber, Kiln-dried	sup. ft.	7,002,947	*	7,978,172	*	9,923,185	*
Baskets ...	"	...	9,127	...	15,011	...	11,249
Seagrass and Bamboo Furniture ...	"	...	46,475	...	23,245	...	30,754
CLASS XI.—Furniture, Bedding, etc.							
Perambulators (including Pushers and Strollers) ...	No.	42,282	73,933	48,668	123,291	50,012	129,311
Furniture ...	"	...	2,418,014	...	1,934,578	...	2,568,682
Picture and Mirror Frames ...	"	...	68,940	...	84,929	...	88,425
Wireless Cabinets (Wooden) ...	No.	133,760	287,737	14,760	42,065	27,723	90,138
Mattresses—							
Spring ...	"	79,140	95,448	25,812	59,710	37,635	86,681
Inner Spring ...	"	17,407	70,881	17,217	99,486	28,583	141,235
Kapok, etc. ...	"	*	883,598	82,353	296,485	128,283	381,206
Other Bedding and Pillows ...	...	...	...	...	249,648	...	236,791
Quilts, Down, etc.	No.	16,465	40,111	41,248	83,806	31,732	71,585
Blinds and Awnings—							
Outdoor ...	"	...	61,245	...	45,450	...	49,120
Other ...	"	...	207,452	...	94,239	...	133,680
CLASS XII.—Paper, Stationery, Printing, Bookbinding, etc.							
Cardboard Boxes ...	...	...	1,038,051	...	2,055,657	...	1,858,829
Envelopes ...	...	...	163,946	...	204,379	...	197,774
Exercise Books, etc.	...	...	198,811	...	290,006	...	262,486
Paper Bags ...	...	...	296,621	...	429,951	...	385,817
Paper Containers ...	...	...	131,221	...	329,534	...	264,355
Writing Pads ...	...	...	100,640	...	115,162	...	95,830
Stay Paper ...	...	...	*	...	53,027	...	93,498
Cigarette Papers ...	1,000	1,770,079	53,333	2,816,330	98,067	*	*

\* Not available for publication.

TABLE 580.—Principal Articles Manufactured in N.S.W.,  
1938-39 to 1945-46—*continued*.

Description.	Unit of Quantity	1938-39.		1944-45.		1945-46.	
		Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
		£		£		£	
CLASS XIII.—Rubber.							
Rubber Tyres ...	No.	662,736	1,233,832	358,957	2,224,978	540,103	2,385,907
Rubber Boots and Shoes (including Goloshes) ...	pair	3,557,914	457,170	215,412	119,112	821,340	177,524
Rubber Hose ...	ft.	5,517,879	102,034	6,319,241	290,316	9,820,496	324,257
CLASS XV.—Miscellaneous Products.							
Surgical Instruments and Appliances ...	...	...	51,672	...	189,381	...	252,552
Buttons ...	...	...	31,689	...	205,614	...	244,592
Brushes—							
Hair and Cloth	gross	2,513	27,588	2,995	53,109	2,321	46,281
Nail ...	...	2,376	6,366	3,209	10,688	3,080	10,832
Tooth ...	...	31,223	99,519	43,858	274,880	33,172	163,041
Scrubbing ...	...	2,733	9,953	2,193	13,472	1,966	12,312
Shaving ...	...	450	3,637	1,137	13,720	1,056	13,738
Paint and Varnish ...	...	6,880	59,114	5,620	51,404	10,204	73,255
Other ...	...	2,723	23,522	9,054	80,823	9,404	68,847
Brooms—							
Millet ...	...	4,840	67,080	4,320	108,124	4,455	116,789
Bassine ...	...	1,382	15,520	2,805	59,253	1,806	33,081
Hair and Bristle ...	...	913	17,741	1,179	40,287	2,020	48,168
Mops ...	...	2,602	14,802	8,621	58,600	5,718	61,454
Toys ...	...	...	215,371	...	164,589	...	423,446
Games ...	...	...	*	...	28,602	...	13,433
Tennis Racquet							
Frames ...	doz.	9,348	100,875	*	*	12,611	120,088
Golf Clubs ...	...	6,586	70,841	*	*	2,320	42,216
CLASS XVI.—Heat, Light, and Power.							
Electricity—							
Generated and sold ...	000 units	1,608,269	5,602,877	2,428,794	8,390,734	2,400,499	8,547,825
Used in Generating Station ...	...	87,913	...	153,876	...	142,788	...
Lost ...	...	137,358	...	159,518	...	165,027	...
Generated in Factories for Own Use ...	...	114,949	...	135,148	...	122,887	...
Total Electricity Generated ...	...	1,948,489	5,602,877	2,877,336	8,390,734	2,831,801	8,547,825
Gas—							
Sold ...	000 cub. ft.	9,330,921	1,546,562	13,047,341	2,495,467	13,353,932	2,586,724
Used in Own Works ...	...	80,565	...	75,838	...	76,856	...
Lost ...	...	1,484,699	...	1,800,402	...	1,870,922	...
Total Gas made ...	...	10,896,185	1,546,562	14,923,581	2,495,467	15,301,710	2,586,724

\* Not available for publication.

INDIVIDUAL INDUSTRIES.

In the following pages particulars are given of the structure and production of certain of the more important individual secondary industries of New South Wales. The basis of classification of factory establishments by industry is indicated at page 608. The appropriate classification of each establishment is determined according to its predominate activity, but the particular establishment may also have lesser activities which should, but cannot, be classified to other industries. The quantities of principal articles produced in these individual secondary industries are therefore only the quantities produced by the establishments classified thereto; *the total production of these articles by all establishments* in New South Wales, however classified, is given in Table 580.

CEMENT WORKS.

The extensive deposits of limestone and shale in New South Wales are used for making cement in establishments situated in proximity to the supplies of raw material and coal mines.

TABLE 581.—Cement Works.

Items.	1937-38.	1938-39.	1941-42.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	5	5	5	4	4	4
Average Number of Employees* ...	973	931	872	573	589	633
Total Horse-power installed ...	44,258	48,495	51,273	43,669	43,833	43,779
Value of Land and Buildings £	591,038	586,510	521,441	478,048	467,829	460,622
Value of Plant and Machinery £	956,660	1,059,604	913,454	609,692	595,879	559,638
Salaries and Wages Paid £	269,917	246,406	258,145	183,668	204,524	191,461
Value of Fuel and Power used £	216,983	202,961	228,525	190,671	190,379	186,585
Value of Materials used ...	345,998	385,428	337,800	289,582	360,732	399,841
Value of Output ...	£ 1,469,636	1,453,599	1,279,546	909,029	1,002,168	1,016,973
Value of Production ...	£ 906,655	865,210	713,221	428,776	451,057	430,547
Cement made ... tons	438,267	432,487	412,787	305,384	327,830	320,556
Limestone, Shell, Coral used: tons	602,558	583,743	567,768	386,770	446,420	434,327

\* Average over whole year.

The largest output of cement, 438,267 tons, was recorded in 1937-38. During the war, large quantities of Portland cement and cement goods were used on defence projects, but restrictions were imposed on ordinary public works and civilian building, and output declined. In 1945-46 it was 320,556 tons or 27 per cent. less than in 1937-38.

GLASS AND GLASS BOTTLE WORKS.

In the decade preceding the outbreak of war in 1939, there was substantial progress in the manufacture of glassware in New South Wales, and during the war production was extended to new types such as glassware

for scientific purposes. Much of the activity in glass and glass bottle works comprises bevelling, cutting, silvering, and mirror making. Particulars of the factories are shown below:—

TABLE 582.—Glass and Glass Bottle Works.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	39	41	41	39	40	44
Average Number of Employees* ...	3,214	4,259	3,638	3,652	3,919	4,099
Total Horse-power installed ...	9,073	9,895	9,933	10,869	10,502	13,463
Value of Land and Buildings £	722,331	929,555	961,858	977,800	987,222	1,007,736
Value of Plant and Machinery £	467,836	624,351	653,432	634,656	736,158	766,194
Salaries and Wages paid... £	672,740	1,062,754	1,114,820	1,156,862	1,115,996	1,272,367
Value of Fuel and Power used £	158,609	278,421	331,328	348,341	376,093	408,736
Value of Materials used ... £	693,688	1,011,068	1,038,684	1,074,927	1,195,605	1,197,863
Value of Output ... .. £	2,024,036	3,013,102	3,041,790	3,219,808	3,319,059	3,610,064
Value of Production ... .. £	1,171,739	1,723,613	1,671,778	1,796,540	1,747,361	2,003,465

\* Average over whole year.

The number of employees in glass and glass bottle works increased from 3,214 in 1938-39 to 4,259 in 1941-42, fell to 3,652 in 1943-44, and subsequently rose to 4,099 in 1945-46. The value of production amounted to £1,171,739 in 1938-39; during the war years 1941-42 to 1944-45, it was about 50 per cent. higher, and in 1945-46 the value increased to £2,003,465, or 71 per cent. above the pre-war level.

#### BRICK, TILE AND POTTERY WORKS.

Utilising the abundance of clay, brickworks have been established in many parts of the State. In a number of cases the industry is associated with tile-making and pottery. Particulars of these industries are shown below:—

TABLE 583.—Brick, Tile and Pottery Works.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	176	144	108	90	98	141
Average Number of Employees* ...	5,043	4,096	2,453	1,981	2,260	3,314
Total Horse-power installed ...	20,063	21,517	18,485	14,923	16,719	20,659
Value of Land and Buildings £	1,047,946	1,087,999	967,143	822,902	920,181	1,051,640
Value of Plant and Machinery £	1,232,838	1,100,952	1,003,087	779,692	819,542	1,109,588
Salary and Wages Paid ... £	1,118,664	1,072,404	708,134	565,077	659,698	928,213
Value of Fuel and Power used £	356,964	315,826	190,957	145,850	179,130	275,608
Value of Materials used ... £	380,051	451,263	302,119	200,958	262,917	360,688
Value of Output ... .. £	2,611,482	2,362,560	1,507,074	1,184,595	1,357,083	1,930,661
Value of Production ... .. £	1,874,467	1,595,471	1,014,598	777,787	915,036	1,282,365

\* Average over whole year.

Ordinarily the local factories supply all the bricks, roofing tiles, and earthenware pipes required for use in New South Wales, but it is usual for a considerable proportion of the floor and wall tiles to be imported.



Production of brick, tile and pottery works fell to very low levels during the depression years, and again during the war when all non-military construction work was restricted severely. Although it began to increase again after 1943-44, the output in 1945-46 remained very much below the pre-war and pre-depression levels. Of bricks (excluding firebricks), the declines in output were 93.5 per cent. between 1928-29 and 1931-32 and 85 per cent. between 1938-39 and 1943-44. In 1945-46 brick production was 61.9 per cent. less than in 1938-39 and 66.9 per cent. less than in 1928-29.

In 1946 the State Government resumed and re-opened the State Brick-works at Homebush Bay (sold in 1935) to help overcome a post-war shortage of bricks; production commenced in August of that year.

The following statement shows the output of the principal products of these works at intervals since 1928-29:—

TABLE 584.—Output of Bricks, Tiles, etc.

Products.	1928-29.	1931-32.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Bricks ... 000	437,158	28,521	379,236	255,009	105,663	54,600	72,140	144,594
£	1,625,464	81,765	1,265,555	924,605	404,556	217,936	325,434	695,097
Firebricks 000	8,642	5,875	19,070	22,348	24,167	20,441	20,652	18,732
£	103,985	71,292	310,895	573,831	616,942	521,738	551,093	490,896
Tiles—Roofing 000	20,414	1,094	20,129	14,488	1,244	1,180	3,297	12,230
£	332,284	13,799	305,080	207,656	17,927	19,333	51,099	215,969
Other	£ 40,896	6,313	39,468	27,133	6,289	*	3,984	10,265
Pipes ...	£ 250,151	49,221	402,613	284,681	168,495	148,281	108,837	236,907
Pottery ...	£ 256,873	90,330	231,518	263,818	242,897	222,010	260,001	249,119

\* Not available for publication.

# CHEMICALS, DRUGS, AND MEDICINES.

The production of industrial and heavy chemicals and pharmaceutical and toilet preparations developed considerably during the war years. A summary of the operations of the relevant factories in recent years is contained in the following table:—

TABLE 585.—Chemicals, Drugs, and Medicines.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	132	162	175	196	210	219
Average Number of Employees*...	2,820	3,605	4,211	4,774	5,059	5,606
Total Horse-power Installed ...	7,256	9,951	11,740	13,299	20,134	20,178
Value of Land and Buildings ...	£ 1,044,646	1,376,315	1,636,581	2,041,277	2,196,971	2,107,542
Value of Plant and Machinery	£ 613,642	858,468	1,521,038	2,146,185	2,167,455	1,875,385
Salaries and Wages Paid	£ 534,983	791,663	1,079,472	1,308,023	1,424,914	1,627,455
Value of Fuel and Power Used	£ 66,628	107,633	167,975	194,901	208,156	247,038
Value of Materials Used	£ 1,982,714	3,238,718	3,769,313	4,338,550	4,494,760	5,288,440
Value of Output ...	£ 4,424,219	6,831,890	8,015,859	9,033,965	9,449,223	10,830,154
Value of Production ...	£ 2,374,877	3,485,539	4,078,571	4,500,514	4,746,367	5,294,676

\* Average over whole year.

Between 1938-39 and 1945-46 the number of establishments increased by 87 (66 per cent.), the number of employees by 99 per cent., the value of land, buildings, and machinery by 140 per cent., and the value of production by 123 per cent.

### SOAP AND CANDLE FACTORIES.

A wide variety of household and toilet soaps and soap extracts and powders is produced in New South Wales, as well as the comparatively small quantity of candles required for local use. Although production expanded during the war, the demands of the Services left soap, etc. for civilian use in short supply. The following table shows particulars relating to the soap and candle factories:—

TABLE 586.—Soap and Candle Factories.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	27	35	34	33	34	40
Average Number of Employees*...	1,460	1,702	1,751	1,670	1,642	1,721
Total Horse-power installed ...	3,952	4,280	4,629	4,376	4,336	4,280
Value of Land and Buildings £	335,682	379,770	378,640	374,577	369,771	376,634
Value of Plant and Machinery £	224,237	241,596	219,442	195,082	165,140	161,333
Salaries and Wages paid... £	284,580	419,313	458,096	465,930	440,541	495,275
Value of Fuel and Power used £	30,078	48,410	59,594	57,245	49,335	50,061
Value of Materials used ... £	796,759	1,457,562	1,744,793	1,591,239	1,641,446	1,686,739
Value of Output ... £	1,825,877	3,180,112	3,593,398	3,135,574	3,230,507	3,408,769
Value of Production ... £	999,040	1,674,140	1,789,011	1,487,090	1,539,726	1,671,969
Materials Treated—						
Tallow ... cwt.	242,592	380,214	499,252	427,486	411,702	401,129
Alkali for Soap... cwt.	81,315	106,384	121,411	121,021	104,570	120,027
Resin ... cwt.	25,539	19,476	10,434	6,590	6,739	4,762
Coco-nut Oil ... cwt.	68,866	96,806	48,298	39,749	42,353	41,922
Principal Products—						
Soap ... cwt.	478,488	656,527	714,317	533,924	524,958	518,114
Soap Extracts and powders lb.	6,266,064	13,887,776	17,068,688	25,173,232	26,429,648	29,429,568
Glycerine† lb.	3,057,600	5,003,640	6,157,312	4,459,840	3,936,688	3,982,720
Soda Crystals† ... lb.	2,540,944	3,389,344	3,169,152	1,635,312	1,496,208	1,417,472

\* Average over whole year. † Total production of glycerine and soda crystals in 1945-46 (including quantities made in chemical works as well as in soap factories) was 4,844,448 lb. and 4,132,352 lb. respectively.

### METAL AND MACHINERY WORKS, ETC.

Factories engaged in the treatment of industrial metals and the manufacture of machinery, conveyances, etc. comprise the largest group of manufacturing industries in New South Wales. The growth of these industries was checked during the depression but otherwise proceeded steadily during the years 1914 to 1939, and accelerated during the war (1939-45) when munitions, aeroplanes, ships, machine tools and mechanical equipment of types and in quantities not formerly manufactured in New South Wales were produced. The cessation of war production and the changing over of plant to peace-time uses caused the decrease in these industries in 1945-46.

A comparative statement showing the development of the metal and machinery works since 1911 is given below:—

TABLE 587.—Metal and Machinery Works, 1911 to 1945-46.

Year.	Number of Establishments.	Average Number of Employees.*	Total horse-power installed.	Salaries and Wages Paid.	Value of Materials and Fuel Used.	Value of Output.	Value of Production.
1911 ...	934	29,066	37,313	£000 3,426	£000 7,986	£000 13,829	£000 5,843
1920-21 ...	1,262	45,603	132,263	9,897	23,789	37,064	13,275
1928-29 ...	2,170	62,090	199,475	15,045	31,922	54,095	23,073
1929-30 ...	2,144	54,574	200,234	13,314	26,610	46,274	19,664
1930-31 ...	1,981	41,402	195,789	9,160	16,897	29,331	12,934
1931-32 ...	1,956	38,981	234,910	7,345	16,332	27,730	11,398
1932-33 ...	1,957	43,902	233,224	8,489	20,875	33,774	12,899
1933-34 ...	2,059	49,750	259,299	9,416	24,934	40,230	15,296
1934-35 ...	2,200	57,810	282,784	11,163	30,111	48,402	18,291
1935-36 ...	2,293	66,277	293,601	13,174	35,636	57,777	22,141
1936-37 ...	2,401	73,464	311,043	14,795	42,124	67,996	25,872
1937-38 ...	2,545	81,472	337,431	17,451	47,701	76,808	29,107
1938-39 ...	2,634	82,452	383,350	18,495	48,172	79,863	31,691
1939-40 ...	2,667	86,341	391,944	20,345	53,592	87,923	34,331
1940-41 ...	2,781	105,597	431,557	26,988	68,344	113,308	44,994
1941-42 ...	2,837	132,444	466,039	40,134	86,439	146,553	60,114
1942-43 ...	2,913	158,113	514,395	51,554	98,470	172,797	74,327
1943-44 ...	3,127	163,023	529,279	53,452	101,273	179,798	78,525
1944-45 ...	3,296	151,076	537,033	48,040	92,038	164,697	72,659
1945-46 ...	3,530	136,602	540,596	42,478	77,319	139,890	62,571

\* Average over whole year.

In the following table the metal and machinery works are grouped according to their predominant activity to show the extent of the operations during 1945-46 of the principal industries that comprise this factory class:—

TABLE 588.—Metal and Machinery Works: Individual Industries, 1945-46.

Industries.	Number of Establishments.	Average Number of Employees*.	Total Horse-power Installed.	Salaries and Wages Paid.	Value of Materials and Fuel Used.	Value of Output.	Value of Production.
Smelting, Iron and Steel ...	16	9,213	214,346	£000 3,737	£000 21,282	£000 28,132	£000 6,850
Extraction and Refining other Metals ...	17	1,372	38,430	507	8,161	10,113	1,952
Iron and Steel Sheets and Sheet Metal Working ...	183	9,165	33,525	2,717	6,858	10,919	4,061
Rolling, Founding, etc. non-ferrous Metals ...	119	4,502	24,030	1,429	4,091	6,559	2,468
Pipes, Tubes, and Fittings ...	14	2,931	13,923	1,063	2,097	3,754	1,657
Wireworking (including nails) ...	72	1,857	16,869	939	2,088	3,511	1,423
Plant, Equipment, Machinery, and other Engineering ...	930	26,264	58,899	8,025	9,143	21,012	11,869
Electrical and Wireless Equipment ...	324	21,316	21,604	5,379	7,280	15,652	8,372
Motor Vehicles and Cycles (construction, assembly, repair, accessories) ...	1,369	11,414	12,616	2,772	3,816	8,101	4,285
Railway and Tramway Rolling Stock ...	41	17,882	35,437	5,502	4,144	10,622	6,478
Ship and Boat Building ...	87	13,160	43,880	4,892	2,770	8,973	6,203
Aircraft ...	25	6,400	9,904	2,030	2,945	5,548	2,603
Other ...	333	11,126	26,119	2,986	2,644	6,994	4,350
Total, Metal and Machinery Works ...	3,530	136,602	549,596	42,478	77,319	139,890	62,571

\* Average over whole year

Because the classification of many individual factories was changed upon the introduction of the new factory classification (see page 608) in 1945-46 comparable data for all these industries are not available for earlier years. In most of these industries, activity was intensified during the war years up to 1943-44 and slackened thereafter. In particular, the employment and value of production in factories manufacturing aircraft, ships, etc. and electrical and wireless equipment increased substantially during the war, and, despite decreases due to cessation of war production, remained in 1945-46 considerably above the 1938-39 level. The only significant decline in employment between these years occurred in factories connected with the motor trade.

Details of the principal items manufactured in these industries during 1938-39 and later years are given in Table 580.

#### IRON AND STEEL WORKS.

The great expansion that has occurred in the metal and machinery works group is bound up in the remarkable progress of the iron and steel industry in New South Wales. A brief review of the history of the industry is presented in the 1937-38 issue of the Year Book at page 628.

The principal iron and steel works are at Newcastle and Port Kembla in proximity to the northern and southern coalfields respectively. These works are modern and efficient, and they are controlled by an organisation which owns the coke works and iron and steel furnaces, large deposits of iron ore, limestone, coal and other minerals, and a fleet of ships for the transport of iron ore and other raw materials and the carriage of finished products of the steel works.

#### *Production of Iron and Steel.*

The following table shows the production of pig iron and steel in New South Wales since 1925-26:—

TABLE 589.—Production of Iron and Steel, 1925-26 to 1945-46.

Year.	Pig Iron.	Steel Ingots.	Steel Rails, Bars and Sections.	Year.	Pig Iron.	Steel Ingots.	Steel Rails, Bars and Sections.
	Tons.	Tons.	Tons.		Tons.	Tons.	Tons.
1925-26	430,597	335,231	339,463	1939-40	1,212,006	1,287,051	1,034,714
1931-32	190,132	221,488	178,740	1940-41	1,461,737	1,844,680	1,337,584
1932-33	336,246	392,666	295,523	1941-42	1,376,893	1,696,606	1,388,620
1935-36	783,233	820,395	671,244	1942-43	1,276,395	1,625,829	1,266,768
1936-37	913,406	1,073,479	837,445	1943-44	1,192,803	1,523,489	1,217,201
1937-38	929,676	1,159,075	905,078	1944-45	1,117,709	1,345,626	1,089,509
1938-39	1,104,605	1,169,149	972,799	1945-46	852,197	1,054,483	853,431

The production of iron and steel was seriously restricted during the depression, but recovered rapidly in 1932-33, and was greater in 1933-34 than in any previous year. Following a period of steady expansion, output reached the record level of 1,461,737 tons of pig iron in 1940-41 and 3,085,226 tons of steel in 1941-42. Thereafter production declined and in 1945-46 amounted to 852,197 tons of pig iron (42 per cent. below the 1940-41 and 23 per cent. below the 1938-39 level) and 1,070,914 tons of steel (38 per cent. and 11 per cent. below 1941-42 and 1938-39 levels, respectively). Factors causing the decreases in output were inadequate and irregular supplies of coal, shortage of labour, and industrial disputes.

An appreciable proportion of the steel produced in New South Wales is manufactured from pig iron reduced in the blast furnace established at Whyalla (South Australia) by the Broken Hill Pty. Co. Ltd. The furnace was blown in in May, 1941, but smelting operations were suspended from May, 1944 until April, 1946.

During 1945-46 oversea exports of iron and steel (excluding scrap iron) from New South Wales amounted to 169,609 tons valued at £2,662,575. The quantities and values of exports in certain earlier years were: 1944-45, 62,528 tons, £845,736; 1939-40, 416,060 tons, £4,650,544; 1938-39, 207,565 tons, £1,921,351; 1937-38, 75,973 tons, £890,783. The bulk of the exports in 1945-46 was shipped to the United Kingdom.

The prices of iron and steel in June of each year 1936 to 1946 are given in the next table. These prices, which are quoted in the annual report of the Australian Tariff Board for 1946-47, are prices net c.i.f. in Australian currency at State capital ports. In June, 1946 the price of pig iron (£5.75 per ton) was 28 per cent. above the 1939 level and 35 per cent. above 1936. The price of bar and structural steel in 1946 was £12.63 per ton, being 25 per cent. and 31 per cent. higher, respectively, than in 1939 and 1936. During and since the war, the prices have been subject to control in terms of the Commonwealth prices regulations.

TABLE 590.—Prices of Iron and Steel in Australia, June, 1936 to 1946.

Item.	1936.	1937.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.
Pig Iron ... ..	4.25	4.25	4.50	4.50	4.50	4.50	4.50	5.75	5.75	5.75	5.75
Bar and Structural Steel	9.65	9.65	10.13	10.13	10.13	10.13	10.13	12.63	12.63	12.63	12.63

Variations in the prices of iron and steel in Australia compare favourably with price movements overseas. The following statement gives comparable prices of pig iron and bar and structural steel to domestic purchasers in Australia, the United Kingdom, and the United States of America in June, 1946 and selected earlier years. The prices are expressed in terms of Australian currency at the existing rates of exchange and their bases of quotation are net c.i.f. State capital ports for Australia, f.o.b. domestic (f.o.r. domestic for bar steel) for the United Kingdom, and f.o.r. domestic for the United States.

TABLE 591.—Prices of Iron and Steel, Australia and Overseas\*, June, 1936 to 1946.

Month of June.	Pig Iron.			Bar Steel.			Structural Steel.		
	Aus- tralia.	United King- dom.	U.S.A.	Aus- tralia.	United King- dom.	U.S.A.	Aus- tralia.	United King- dom.	U.S.A.
1936 ... ..	4.25	4.03	4.73	9.65	8.60	10.40	9.65	9.38	10.12
1939 ... ..	4.50	5.78	5.54	10.13	10.85	12.94	10.13	10.40	12.63
1945 ... ..	5.75	7.43	7.70	12.63	16.85	15.75	12.63	14.65	14.71
1946 ... ..	5.75	8.43	8.80	12.63	17.68	17.51	12.63	15.48	16.46
Percentage in- crease 1939 to 1946 ... ..	28	46	59	25	63	35	25	49	30

Source—Annual Report, Australian Tariff Board, 1946-47.

Prices in Australia have been consistently lower, and between 1939 and 1946 the percentage increases in the prices of iron and steel in the United Kingdom and the United States appreciably exceeded the increases in Australian prices. In this respect, therefore, Australian industry appears to have held a strong competitive advantage.

### *Metal Extraction.*

In addition to the iron and steel works there are other establishments for the treatment of ores and the extraction of metals. The quantity of gold, silver, copper and other metals extracted in 1938-39 and each of the last five years (including pig iron produced in iron and steel works) is shown in the next table:—

TABLE 592.—Metal Extraction in N.S.W., 1938-39 to 1945-46.

Year.	Metals extracted from Ores, Concentrates, etc.						
	Gold.	Silver.	Copper.	Tin.	Iron Pig.	Antimony.	Platinum.
	oz. fine.	oz.	tons.	tons.	tons.	tons.	oz.
1938-39 ... ..	371,748	468,163	6,856	3,236	1,104,605	227	15
1941-42 ... ..	439,154	478,746	10,550	3,332	1,376,893	579	4
1942-43 ... ..	251,321	431,420	10,721	2,869	1,276,395	626	...
1943-44 ... ..	278,019	535,891	15,134	2,609	1,192,803	496	...
1944-45 ... ..	218,540	392,410	18,574	2,542	1,117,709	515	...
1945-46 ... ..	205,145	360,158	18,403	2,350	852,197	198	...

Gold and silver have been extracted from ores mined in various parts of Australia, Papua, New Guinea and Fiji, and copper and tin from Australian ores. South Australia is the usual source of iron ore but a quantity has been obtained in recent years from deposits in New South Wales.

### *COTTON MILLS.*

Under the impetus of war, the cotton spinning and weaving industry developed rapidly and its range of products was extended to cover cotton tweeds, duck, drills, canvas, towelling, tyre cord and tyre cord fabric, etc. Between 1938-39 and 1943-44, the number of establishments increased from 13 to 37, the number of employees by 133 per cent. and the value of production by 330 per cent. There was a decline in activity between 1943-44 and 1945-46, the number of employees falling 16 per cent. and the value of production 19 per cent., although the number of establishments rose to 40. Particulars of the spinning and weaving operations of cotton mills in the years 1941-42 to 1945-46 as compared with the pre-war year 1938-39 are contained in the following table:—

TABLE 593.—Cotton Mills (Spinning and Weaving).

Item.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	13	31	36	37	39	40
Average Number of Employees* ...	1,716	3,735	4,116	4,006	3,046	3,381
Total Horse-power installed ...	3,395	7,376	7,735	8,263	8,835	8,805
Value of Land and Buildings £	290,597	569,542	617,119	632,319	653,286	634,222
Value of Plant and Machinery £	258,456	775,545	836,733	760,581	849,169	636,388
Salaries and Wages paid ...	217,003	681,955	823,676	885,957	872,166	776,932
Value of Fuel and Power used £	22,122	56,060	61,281	65,761	64,682	63,882
Value of Materials used ...	£ 618,931	2,023,212	2,447,125	2,848,901	2,742,768	2,327,797
Value of Output ...	£ 1,046,892	3,347,991	4,040,765	4,661,179	4,554,404	3,804,932
Value of Production ...	£ 405,839	1,268,719	1,532,369	1,746,517	1,746,934	1,413,233

\* Average over whole year.

The production of cotton and woollen and worsted piece goods in cotton mills during the years 1935-36 to 1945-46 is shown in table 597.

WOOLLEN AND TWEED MILLS.

Most of the woollen goods required in New South Wales are manufactured in Australia. Woollen mills have been established in Sydney, Goulburn, Albury, Lithgow, Liverpool, and Orange. In 1945-46 there were thirty-seven establishments in this group, employing on the average 3,465 males and 3,336 females. In some of the factories all the processes, from scouring the greasy wool to weaving tweed and cloth, were carried out. Others were concerned with spinning, or topmaking, or weaving only, and tops were made for export as well as for local use.

Details of employment, output, and other particulars relating to woollen and tweed mills in 1938-39 and each of the last five years are shown in the following table:—

TABLE 594.—Woollen and Tweed Mills.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	22	32	35	35	37	37
Average Number of Employees*...	6,712	9,304	9,382	8,165	7,021	6,801
Total Horse-power installed ...	11,845	13,088	13,405	13,491	13,753	14,778
Value of Land and Buildings £	697,215	855,025	893,552	925,017	948,954	1,085,639
Value of Plant and Machinery £	1,051,096	1,129,077	1,115,792	1,072,098	1,061,823	1,150,183
Salaries and Wages paid £	974,382	1,729,316	1,974,993	1,876,402	1,626,473	1,655,356
Value of Fuel and Power used £	131,481	159,908	172,495	168,179	149,045	144,693
Value of Materials used ...	2,511,519	5,027,736	5,467,568	4,763,430	3,873,835	3,994,650
Value of Output ...	4,299,710	8,048,015	8,985,689	7,891,709	6,666,216	6,884,484
Value of Production ...	£ 1,656,710	2,860,371	3,345,626	2,960,100	2,643,336	2,745,141
Scoured Wool Processed ... lb.	15,761,440	21,669,515	20,496,145	20,228,128	15,085,781	14,274,249

\* Average over whole year.

The quantity of scoured wool (and its estimated greasy weight) processed for different purposes in New South Wales factories—in woollen and tweed mills and other textile factories and in hat and cap factories—in 1938-39 and each year since 1941-42 was as follows:—

TABLE 595.—Scoured Wool Processed in N.S.W. Factories.

Purpose.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
	000 lb.	000 lb.	000 lb.	000 lb.	000 lb.	000 lb.
Woollen Mills for making—						
Wool tops and noils ...	11,865	17,412	16,486	16,438	12,041	10,361
Woollen Yarn ...	2,286	4,257	4,010	3,790	3,045	3,914
Other textile factories for making						
felt, etc. ...	1,610	2,694	2,566	3,581	3,888	3,845
Hat and cap factories ...	186	269	297	289	209	155
Total Scoured Wool ...	15,947	24,632	23,359	24,098	19,183	18,275
Estimated Weight as in grease	30,125	52,343	50,600	51,060	41,700	39,600

The production of wool tops and noils and woollen and worsted yarn in woollen and tweed mills during 1938-39 and later years is recorded in the following table. The total production shown comprises both the marketable output of tops, noils, and yarn, and also the quantities produced for further processing in the mills.

TABLE 596.—Production of Wool Tops and Noils and Woollen and Worsted Yarn.

Item.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
<b>Tops and Noils—</b>	lb.	lb.	lb.	lb.	lb.	lb.
For sale or addition to stocks...	7,045,824	8,851,671	8,451,201	8,277,651	6,503,162	5,121,227
For further processing in the mills ... ..	3,986,637	8,359,829	7,866,424	7,754,869	5,433,826	5,084,557
<b>Total—Tops ... ..</b>	<b>10,121,072</b>	<b>15,621,821</b>	<b>14,730,827</b>	<b>14,456,140</b>	<b>10,690,810</b>	<b>9,238,954</b>
<b>Noils ... ..</b>	<b>910,489</b>	<b>1,589,679</b>	<b>1,586,798</b>	<b>1,576,380</b>	<b>1,246,178</b>	<b>966,830</b>
<b>Total ... ..</b>	<b>11,032,461</b>	<b>17,211,500</b>	<b>16,317,625</b>	<b>16,032,520</b>	<b>11,936,988</b>	<b>10,205,784</b>
<b>Yarn, Woollen and Worsted—</b>						
For sale or addition to stocks...	4,052,071	8,048,423	8,286,329	6,829,512	4,970,112	4,786,027
For further processing in the mills ... ..	6,439,379	11,380,159	11,244,946	10,226,153	7,476,639	6,825,788
<b>Total—Woollen ... ..</b>	<b>2,375,934</b>	<b>4,540,967</b>	<b>4,491,719</b>	<b>4,142,696</b>	<b>3,425,924</b>	<b>3,983,643</b>
<b>Worsted ... ..</b>	<b>8,115,516</b>	<b>14,387,615</b>	<b>15,039,556</b>	<b>12,912,969</b>	<b>9,020,827</b>	<b>7,628,172</b>
<b>Total ... ..</b>	<b>10,491,450</b>	<b>19,428,582</b>	<b>19,531,275</b>	<b>17,055,665</b>	<b>12,446,751</b>	<b>11,611,815</b>

The next table shows the production of woollen and cotton piece goods and blankets in woollen, tweed, and cotton mills during the years 1935-36 to 1945-46:—

TABLE 597.—Production of Woollen and Cotton Piece Goods, etc.

Year.	Woollen and Worsted Piece Goods (including Serge, Tweed, Flannel).			Cotton Piece Goods (Tweed, Duck, Canvas, Drill, etc.).	Blankets.
	Woollen and Tweed Mills.	Cotton Mills.	Total.	Cotton Mills.	Woollen Mills.
	sq. yd.	sq. yd.	sq. yd.	sq. yd.	pairs.
1935-36 ... ..	*	*	11,471,300	2,021,963	119,154
1936-37 ... ..	*	*	11,701,500	1,774,599	119,698
1937-38 ... ..	11,503,931	305,315	11,809,246	1,984,802	134,499
1938-39 ... ..	12,467,930†	481,178	12,949,108	1,938,920	106,447
1939-40 ... ..	14,169,359	504,820	14,674,179	4,963,824	123,821
1940-41 ... ..	15,837,527	519,549	16,357,076	8,240,822	127,971
1941-42 ... ..	17,581,438	437,720	18,019,158	9,330,863	183,471
1942-43 ... ..	19,463,362	474,748	19,938,110	12,263,135	181,782
1943-44 ... ..	16,858,632	649,281	17,507,913	13,511,786	170,303
1944-45 ... ..	14,322,198	403,599	14,725,797	12,791,137	159,367
1945-46 ... ..	13,059,490	196,210	13,255,700	8,778,988	107,198

\* Not available for publication.

† Includes 107,430 square yards produced in knitting mills.

During the war much of the production of woollen, tweed, and cotton mills was for war purposes. The rising outputs of woollen and worsted cloth, serge, drill, canvas, blankets, etc. to satisfy service requirements more than offset the decreases in the quantity of other piece goods produced, the demand for which contracted because of the rationing of civilian clothing and household drapery. The production of woollen and worsted piece goods rose from 12,949,108 square yards in 1938-39 to a record level (19,938,110 square yards) in 1942-43, but by 1945-46 had fallen again to 13,255,700 square yards, or 2.4 per cent. above the 1938-39 level. The quantity of cotton piece goods produced was greatest (13,511,786 square yards) in 1943-44 and then decreased by 35 per cent. to 8,778,988 yards in 1945-46, but even so, was 460 per cent. greater than in 1938-39 when 1,908,920 yards were produced.



HOSIERY AND KNITTING FACTORIES.

Marked progress has been made in the production of hosiery and knitted goods. In 1945-46 there were 104 establishments employing 5,049 persons, including 3,900 women and girls, the value of materials and fuel used was £2,444,984, and the value of production amounted to £1,834,592.

The following comparative statement reviews the operations of the hosiery and knitting factories in 1938-39 and each of the last five years:—

TABLE 598.—Hosiery and Knitting Mills.

Particulars.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	78	82	85	95	97	104
Average Number of Employees*	5,298	5,145	4,757	5,030	5,100	5,049
Total Horse-power Installed ...	2,857	3,156	3,256	3,333	3,413	3,990
Value of Land and Buildings £	701,582	691,974	712,877	771,679	810,035	835,283
Value of Plant and Machinery £	622,681	502,738	460,250	426,946	397,551	432,830
Salaries and Wages paid... £	697,004	893,557	887,510	980,884	997,553	1,086,669
Value of Fuel and Power used £	36,468	37,381	38,491	43,211	39,976	41,278
Value of Materials used ... £	1,482,743	2,697,254	2,625,670	2,871,873	2,464,992	2,403,706
Value of Output ... £	2,619,764	4,472,703	4,290,171	4,778,157	4,360,564	4,279,576
Value of Production ... £	1,100,553	1,738,068	1,626,010	1,863,073	1,855,596	1,834,592
Yarn used—						
Woolen ... .. lb.	1,536,598	4,672,422	4,300,930	3,528,062	3,279,307	1,932,519
Cotton ... .. "	2,578,800	4,731,299	3,914,104	3,744,132	3,905,529	3,434,683
Silk ... .. "	223,575	52,024	768	.....	.....	2,100
Rayon ... .. "	3,031,145	2,840,024	2,017,284	2,782,433	2,781,427	2,907,878
Articles produced—						
Socks and Stockings doz. pairs	1,055,219	1,087,784	986,642	999,401	809,458	728,376
Knitted Apparel—						
Underwear ... .. doz.	1,033,221	1,212,042	937,655	963,145	1,021,176	832,958
Cardigans, Sweaters, etc. doz.	63,315	187,174	189,269	160,634	136,948	126,263
Other knitted garments doz.	249,584	818,046	835,832	711,483	571,082	581,514
Value of Production ... £	93,161	68,112	49,516	78,068	88,093	103,476
Value of Output ... £	303,220	293,143	273,535	433,415	516,288	656,351

\* Average over whole year.

WOOL-SCOURING AND FELLMONGERING.

The proportion of the wool clip of New South Wales scoured locally is small and fluctuates considerably from year to year. Oversea manufacturers generally prefer to buy wool in the grease and to treat it according to the purposes for which it is to be used.

Particulars of the operations of the wool-scouring and fellmongering works in 1938-39 and each of the last five years are shown below:—

TABLE 599.—Wool-scouring and Fellmongering.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	29	30	30	29	30	31
Average Number of Employees*	871	1,323	1,362	1,500	1,388	1,310
Total Horse-power Installed ...	3,590	4,361	4,253	4,736	4,261	4,606
Value of Land and Buildings £	162,973	177,304	173,327	184,411	173,774	179,331
Value of Plant and Machinery £	150,527	194,247	192,933	236,433	210,291	217,594
Salaries and Wages paid... £	208,292	401,764	447,348	528,074	482,993	438,840
Value of Fuel and Power used £	35,066	73,613	87,577	83,371	71,532	67,121
Value of Materials used†	1,039,761	1,328,061	1,518,671	1,588,671	1,292,134	1,339,027
Value of Output... £	1,344,895	1,902,586	2,193,347	2,327,906	1,958,240	2,018,145
Value of Production ... £	270,068	500,913	587,099	655,864	594,574	611,997
Materials Treated—						
Greasy Wool ... .. lb.	33,195,743	54,538,458	51,679,953	44,680,379	36,499,319	36,913,441
Skins ... .. No.	3,443,374	5,589,927	5,670,023	6,147,872	5,611,056	4,322,408
Skin Pieces ... .. lb.	1,564,419	2,188,555	1,196,781	2,293,755	2,199,370	2,181,075
Articles Produced—						
Scoured Wool ... .. lb.	30,025,413	42,533,862	43,655,712	43,089,009	35,063,916	33,240,428
Pelts ... .. No.	1,752,626	3,139,337	2,534,991	2,955,365	2,891,407	2,309,074

\* Average over whole year.

† Exclusive of value of large quantities of wool and/or skins treated on commission basis.

Scoured wool is produced also in the wool-washing plants of woollen mills for sale, for addition to stocks, and for further processing in the mills. The total quantities of scoured wool produced in New South Wales factories, comprising that treated in woollen mills and wool-scouring and fellmongering works, in 1938-39 and each of the last five years are shown below:—

TABLE 600.—Production of Scoured Wool in New South Wales Factories.

Scoured Wool Produced.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
	lb.	lb.	lb.	lb.	lb.	lb.
<b>In Wool-scouring and Fellmongering Works—</b>						
From scouring ... ..	18,120,054	24,213,996	23,527,328	21,328,824	16,315,430	17,772,035
From fellmongering ... ..	11,905,359	18,319,866	20,128,384	21,760,185	18,748,486	15,468,393
Total ... ..	30,025,413	42,533,862	43,655,712	43,089,009	35,063,916	33,240,428
<b>In Woollen Mills—</b>						
For sale or addition to stocks	1,221,080	2,152,700	3,817,021	3,096,942	2,230,491	2,567,688
For further processing in the mills ... ..	4,695,463	11,822,710	10,988,700	11,083,072	8,977,612	7,949,709
Total ... ..	5,916,543	13,975,410	14,805,721	14,180,014	11,208,103	10,517,397
<b>Total produced—</b>						
For sale or addition to stocks	31,246,493	44,686,562	47,472,733	46,185,951	37,294,407	35,808,116
For further processing in the woollen mills... ..	4,695,463	11,822,710	10,988,700	11,083,072	8,977,612	7,949,709
Total ... ..	35,941,956	56,509,272	58,461,433	57,269,023	46,272,019	43,757,825

## TANNERIES.

The supply of hides and skins is dependent principally on livestock slaughterings, which in turn are affected by the level of meat and wool prices and the nature of seasons. During the war, the quantity of hides and skins treated in tanneries to produce leather and basils, etc. increased materially; the value of production rose 79.1 per cent. from £574,888 in 1938-39 to £1,029,879 in 1945-46.

The marketing of hides and leather is controlled by the Australian Hides and Leather Industries Board, established in November, 1939, which determines the quantities of hides and leather to be exported or sold for home consumption.

Particulars of the operations of tanneries in New South Wales in 1938-39 and each of the last five years are:—

TABLE 601.—Tanneries.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	60	68	70	73	76	76
Average Number of Employees* ...	1,632	1,967	1,907	1,909	1,880	1,945
Total Horse-power Installed ...	5,180	6,331	6,934	8,161	6,910	7,462
Value of Land and Buildings ...	297,636	372,936	392,089	402,772	410,179	424,259
Value of Plant and Machinery ...	208,702	235,504	242,462	240,927	261,903	294,795
Salaries and Wages paid... £	357,210	537,636	588,656	665,304	610,547	631,168
Value of Fuel and Power used ...	31,668	42,548	47,830	52,573	50,953	49,153
Value of Materials used ...	1,303,629	2,187,252	2,215,300	2,217,021	2,184,026	2,214,699
Value of Output ...	1,910,085	3,152,318	3,215,377	3,283,040	3,234,137	3,293,731
Value of Production ...	574,888	922,518	952,247	1,013,446	999,158	1,029,379
Materials Treated—						
Cattle Hides ... No.	560,534	867,613	872,817	833,066	813,955	787,543
Calf Skins ... No.	693,055	631,835	686,138	623,064	656,103	687,043
Sheep Pelts ... No.	1,608,478	2,049,564	1,890,447	2,044,266	1,909,146	1,529,887
Sheep Skins ... No.	1,401,338	1,493,803	1,637,657	1,626,478	1,874,581	1,638,537
Goat Skins ... No.	929,286	780,014	800,903	722,513	738,241	731,162
Other Hides and Skins ... No.	2,237	15,213	20,288	28,367	28,567	32,671
Bark used ... tons	8,092	9,513	4,902	4,683	4,833	3,808
Tanning Extract (vegr.) used tons	1,731	3,837	5,402	5,679	5,781	5,504
Leather Produced—						
Sold by area† ... sq. ft.	26,058,549	35,560,378	36,787,557	37,060,880	36,810,268	35,731,943
Sold by weight‡ ... lb.	11,119,957	15,682,400	15,727,921	14,644,593	13,053,164	13,277,238
Basils Produced ... lb.	1,386,207	1,556,206	1,272,356	979,573	1,199,262	896,864

\* Average over whole year.

† Dressed and upper from hides and skins and upholstery leather.

‡ Sole, harness, some dressed and upper from hides.

#### HAT AND CAP FACTORIES.

There are 22 factories for the manufacture of hats and caps, all except one being in the metropolitan district, and in 1945-46 the employees numbered 1,240, including 659 females. During the war years, civilian hats and caps were rationed and the factories were occupied mainly in supplying defence requirements.

Particulars of the operations in the factories in 1938-39 and each of the last five years are as follows:—

TABLE 602.—Hat and Cap Factories.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	23	22	24	22	22	22
Average Number of Employees* ...	1,593	1,549	1,400	1,292	1,230	1,240
Total Horse-power installed ...	1,335	1,545	1,545	1,516	1,564	1,602
Value of Land and Buildings ...	209,199	215,599	225,888	220,826	227,032	225,003
Value of Plant and Machinery ...	94,611	102,789	93,343	83,544	75,595	75,244
Salaries and Wages paid... £	257,731	331,745	344,375	345,563	318,185	327,132
Value of Fuel and Power used ...	12,209	15,809	17,536	17,544	15,296	14,662
Value of Materials used ...	312,386	469,641	510,673	477,932	401,890	351,860
Value of Output ...	684,837	962,324	1,044,151	1,021,500	974,061	898,552
Value of Production ...	360,242	476,874	515,942	526,024	556,875	532,030
Materials used—						
Rabbit Skins ... lb.	673,519	954,417	990,700	849,576	725,035	603,512
Scoured Wool ... lb.	185,994	268,842	297,198	208,241	208,880	155,450
Hats made—Felt ... doz.	135,262	169,613	165,889	153,993	132,341	118,109
Other ... doz.	92,148	85,918	58,399	45,214	48,642	30,375
Caps made ... doz.	20,507	36,846	26,213	32,336	28,318	22,227

\* Average over whole year.

Hats and caps are made also in millinery establishments; in 1945-46 these numbered 79 and employed 1,265 persons, and the value of their production amounted to £449,019. The total production of hats and caps in all establishments in 1938-39, 1944-45, and 1945-46 is shown in Table 580.

## BOOT AND SHOE FACTORIES.

Particulars of the operations of boot and shoe factories in New South Wales in 1938-39 and each of the last five years are shown in the following table:—

TABLE 603.—Boot and Shoe Factories.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	101	105	103	109	119	134
Average Number of Employees*	5,741	6,244	5,840	5,779	5,742	6,053
Total Horse-power installed ...	2,323	2,653	2,592	2,694	2,816	3,349
Value of Land and Buildings £	425,428	528,457	551,385	596,873	588,039	598,184
Value of Plant and Machinery £	243,754	276,634	289,633	290,703	307,707	354,487
Salaries and Wages paid ...	£ 848,733	1,281,105	1,302,418	1,306,389	1,279,481	1,432,430
Value of Fuel and Power used £	16,279	19,419	19,696	21,556	21,997	23,682
Value of Materials used ...	£ 1,369,667	2,510,712	2,376,615	2,437,840	2,435,032	2,347,191
Value of Output ...	£ 2,610,578	4,353,381	4,329,593	4,404,285	4,386,196	4,437,680
Value of Production ...	£ 1,224,632	1,823,250	1,933,232	1,894,889	1,929,167	2,066,807
Leather Used—						
Sole ... .. lb.	5,079,290	9,259,344	9,110,791	7,846,158	7,661,504	6,980,294
Upper ... .. sq. ft.	9,100,230	16,048,171	15,343,438	14,530,189	13,506,084	12,044,556
Ready-made Soles ... pairs	†	614,946	821,632	1,048,149	1,114,425	1,193,204
Ready-made Heels ... pairs	†	†	648,872	829,999	538,952	1,179,247
Articles Produced—						
Boots and Shoes ... pairs	4,762,454	6,204,510	6,065,941	6,478,407	6,803,506	6,136,741
Slippers, etc. ... pairs	£ 2,244,886	3,832,987	3,825,989	3,917,888	4,298,109	3,913,536
Uppers made for sale ... pairs	£ 3,107,106	3,313,771	2,684,835	2,503,589	2,167,082	2,196,603
	£ 349,624	443,818	386,812	406,269	403,805	440,738
	17,133	16,462	13,963	7,045	34,043	†

\* Average over whole year.

† Not available.

Footwear for civilians was included in the war-time clothing rationing scheme and the factories were occupied largely in producing footwear for the defence forces. The output of boots, shoes, and slippers rose from 7,869,560 pairs in 1938-39 to a peak of 9,608,281 pairs in 1941-42 and subsequently declined to 8,333,344 pairs in 1945-46. The value of production rose during these years by 68.8 per cent. from £1,224,632 in 1938-39 to £2,066,807 in 1945-46.

Of the 134 factories manufacturing boots and shoes in 1945-46, 128 were situated within the metropolitan area. Factories making rubber shoes and goloshes are classified as rubber works (see Table 614) and are therefore not included here. The figures in the foregoing table also exclude boot repairing establishments and factories producing boot accessories. Particulars of boot repairing establishments are shown below:—

Items.	1938-39.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	621	747	779	793
Average Number of Employees ...	1,091	1,378	1,450	1,526
Value of Materials and Fuel used ...	£ 138,209	229,166	255,345	266,249
Value of Output ...	£ 414,961	696,393	768,628	768,359
Leather used—				
Sole ... .. lb.	836,925	1,119,184	1,244,031	1,302,634
Upper ... .. sq. ft.	13,551	24,550	24,033	17,189
Soles (ready-made) ... pairs	*	161,175	117,615	156,266
Heels (ready-made) ... pairs	*	58,619	49,312	71,989

\* Not available.

## FLOUR MILLS.

The amount of mill power available for grinding and dressing grain is ample for manufacturing the flour consumed in New South Wales. The export trade in flour is large but fluctuates more or less with variations in wheat production. Restrictions upon wheat growing affected operations

during the war years. Flour production in 1945-46 was 451,895 tons compared with 547,112 tons in 1938-39 and an average of 480,472 tons in the five years ended June, 1945.

Particulars of the tax imposed by the Commonwealth Government on flour for home consumption to provide finance for assistance to wheat farmers are given in the chapter "Agriculture" of this Year Book. The rate of tax was £2 18s. 10d. per 2,000 lb. net weight of flour from 23rd October, 1940 until it lapsed on 22nd December, 1947.

Details concerning flour-milling in New South Wales in 1938-39 and each of the last five years are as follows:—

TABLE 604.—Flour Mills.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	54	53	52	53	53	54
Average Number of Employees*	1,356	1,226	1,146	1,360	1,436	1,403
Total Horse-power installed ...	10,503	11,749	11,598	12,359	12,176	12,864
Value of Land and Buildings £	805,116	818,741	808,895	823,130	839,533	854,211
Value of Plant and Machinery £	710,207	686,559	659,686	674,825	696,280	725,274
Salaries and Wages paid... £	312,778	360,835	360,910	459,483	501,287	487,008
Value of Fuel and Power used £	86,720	80,710	75,681	101,626	109,099	99,166
Value of Materials used ... £	4,297,338	4,681,341	4,008,054	5,480,338	6,129,508	5,267,898
Value of Output ... £	5,281,514	5,636,031	4,815,957	6,668,262	7,436,722	6,276,225
Value of Production ... £	897,456	873,980	732,272	1,086,298	1,192,115	909,251
Wheat Treated ... bush.	26,427,132	22,247,508	18,852,942	25,264,614	27,948,773	23,203,802
Articles Produced—						
Flour ... .. †tons	547,112	448,329	363,452	496,853	516,168	451,895
Bran, Pollard, Sharps, etc. †tons	222,116	194,132	154,051	208,496	217,482	190,485
Wheat Meal ... .. †tons	9,268	22,983	34,670	19,022	36,428	32,609

\* Average over whole year.

† Tons of 2,000 lb.

# BISCUIT FACTORIES.

The following table shows particulars of the operations of biscuit factories in 1938-39 and each of the last five years:—

TABLE 605.—Biscuit Factories.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	16	13	15	16	17	21
Average Number of Employees*	2,667	2,963	3,016	2,710	2,111	1,873
Total Horse-power installed ...	4,734	5,811	5,369	5,469	5,540	5,705
Value of Land and Buildings £	373,646	461,016	468,422	484,865	493,110	571,044
Value of Plant and Machinery £	268,786	286,773	274,522	243,559	226,269	263,864
Salaries and Wages Paid £	375,701	541,127	665,511	622,784	511,548	463,531
Value of Fuel and Power Used £	38,203	54,658	69,752	61,207	52,594	46,388
Value of Materials Used £	830,341	1,189,565	1,313,685	1,323,951	1,067,135	889,660
Value of Output ... £	1,663,976	2,418,450	2,891,236	2,830,782	2,422,435	1,856,179
Value of Production ... £	705,432	1,174,227	1,507,799	1,445,624	1,302,706	920,131
Materials Treated—						
Flour ... .. tons (2,000 lb.)	14,838	25,191	34,906	28,239	18,295	15,113
Sugar ... .. tons	3,528	4,433	5,009	5,028	4,420	4,076
Biscuits Produced† ... lb.	43,234,873	65,131,261	92,315,979	77,600,207	65,334,606	46,718,266

\* Average over whole year.

† Including ice cream cones.

During the war biscuits were produced in large quantities for the defence forces. The production of biscuits in biscuit factories increased 50.6 per cent. between 1938-39 and 1941-42 and by a further 62.9 per cent. to a record of 92,315,979 lb. in 1942-43, but in 1945-46 the output was only 8 per cent. greater than in 1938-39. The value of production rose 89.6 per cent. between 1938-39 and 1942-43, and although it fell 39.0 per cent. between 1942-43 and 1945-46, it was then 15.7 per cent. greater than in 1938-39.

An export trade in biscuits is maintained chiefly with Eastern countries and the islands of the Pacific. In 1945-46, 8,132,386 lb. of biscuits were exported overseas, compared with an average of 1,835,479 lb. in the pre-war years 1936-37 to 1938-39 and 34,133,459 lb. (mostly for the armed forces) in 1942-43.

#### SUGAR MILLS AND SUGAR REFINING.

Sugar cane is cultivated in the lower valleys of the northern coastal rivers of New South Wales, and the cane is crushed at three large mills, situated at Harwood Island on the Clarence River, at Broadwater on the Richmond, and at Condong on the Tweed. The number of employees in these mills rose from 212 in 1938-39 to 283 in 1945-46, but the output of raw sugar declined because scarcity of labour and fertilisers on the cane fields reduced supplies of cane to the mills.

There is one sugar refinery in New South Wales (situated at Pyrmont, Sydney) which treats raw sugar from Queensland mills as well as those on the North Coast. Employment in the refinery rose from 1,171 in 1938-39 to 1,471 in 1944-45 and fell to 1,428 in 1945-46.

Additional particulars of the operations of the sugar mills and refinery were given in previous issues of the Year Book, but are no longer available for publication.

The sugar industry is conducted subject to an agreement between the Commonwealth and Queensland Governments, particulars of which are given in the chapter "Agriculture" of this Year Book (see page 473). The term of the current agreement extends to 31st August, 1951.

#### BUTTER FACTORIES.

Butter-making is one of the chief industries connected with the preparation of articles of food, and more than 95 per cent. of the butter made in New South Wales is made in butter factories, most of which are situated in country districts. The quantity of butter produced in these factories depends mainly on the prevailing seasonal conditions in the dairying districts. Production was at its greatest (143,208,344 lb.) in the bountiful season 1933-34. During 1938-39 and the later years shown in Table 606, seasonal conditions were generally unfavourable and the industry was under-manned and handicapped by other war-time difficulties. The production of butter fell from 113,840,734 lb. in 1938-39 to 71,721,764 lb. in 1944-45, the lowest output since 1923-24, and in 1945-46 was 74,280,087 lb. or 48 per cent. below the 1933-34 record.

Most of the butter factories are organised on a co-operative basis and each dairy-farmer who supplies cream is paid according to its butter-fat content. The factories are under the general oversight of government officials who advise and instruct dairy farmers and factory managers in matters connected with the industry to promote and maintain the high quality of its products. Most of the butter produced in New South Wales factories is of the "choicest" quality and very little is classified as second or lower grade.

Butter is important in the export trade. Arrangements for regulating the marketing of butter for both local consumption and export are described in the chapter "Dairying Industry" of this Year Book.

Details concerning butter factories and their operations in 1933-34, 1938-39 and each of the last four years are shown below:—

TABLE 606.—Butter Factories.

Items.	1933-34.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	104	94	90	90	88	87
Average Number of Employees*	1,204	1,186	1,271	1,343	1,338	1,389
Total Horse-power installed ...	14,622†	19,891	22,291	22,633	23,693	23,449
Value of Land and Buildings £	569,923	564,568	584,473	580,050	585,546	584,091
Value of Plant and Machinery £	639,845	624,145	702,743	703,060	686,927	724,457
Salaries and Wages paid... £	282,334	302,037	368,446	401,944	404,373	447,712
Value of Fuel and Power used £	77,566	82,716	122,755	137,422	132,943	150,537
Value of Materials used ... £	5,384,940	6,673,567	5,966,559	6,213,540	5,062,171	5,784,882
Value of Output ... £	6,053,394	7,342,631	6,563,268	6,843,915	5,739,811	6,517,076
Value of Production ... £	590,858	536,348	473,954	492,953	554,697	590,257
Cream used ... 600-lb.	278,486	211,250	186,063	180,966	147,625	151,290
Butter Produced from—						
N.S.W. Cream ... lb.	142,303,307	113,091,595	93,033,941	87,207,715	71,144,483	73,771,886
Cream from other States lb.	905,037	749,139	741,433	649,183	577,281	508,201
Total Butter produced lb.	143,208,344	113,840,734	93,775,379	87,856,898	71,721,764	74,280,087

\* Average over whole year.

† Full capacity of machinery in use.

In addition to the foregoing factories, there were other establishments, numbering 62 in 1945-46 engaged in the treatment of dairy produce, viz. 27 making cheese, 32 making bacon and ham, and 3 manufacturing condensed and powdered milk and other milk products. The following table shows particulars of the operations of these factories in 1938-39 and each of the last five years; the quantities of condensed, powdered, and concentrated milk produced are not available for publication.

TABLE 607.—Cheese, Bacon, and Preserved Milk Factories.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	60	58	56	56	50	62
Average Number of Employees*	730	1,023	1,073	1,154	1,304	1,289
Value of Land and Buildings £	259,519	353,066	366,988	385,721	389,518	403,119
Value of Plant and Machinery £	213,597	239,151	280,813	278,237	293,558	345,953
Salaries and Wages paid... £	161,053	264,895	289,929	326,342	301,651	399,132
Value of Materials and Fuel £	1,484,822	2,291,670	2,554,962	3,225,213	3,919,324	3,611,395
Value of Output ... £	1,850,840	2,896,149	3,198,849	3,992,740	4,978,110	4,552,194
Value of Production ... £	366,018	604,479	643,887	767,527	1,058,786	940,706
Articles Produced—						
Cheese ... lb.	7,193,022	5,224,899	5,146,431	5,374,388	4,399,847	4,857,690
Bacon and Ham† ... lb.	21,721,914	28,318,840	29,430,124	29,852,545	43,846,580	37,494,332

\* Average over whole year. † Excluding bacon made from Interstate imports of green bacon:—4,220,085 lb. in 1938-39, and 4,265,331 lb., 3,860,163 lb., 827,110 lb., 799,298 lb., and 1,357,100 lb. in successive years 1941-42 to 1945-46.

Butter, cheese, bacon, and hams are produced on farms as well as in factories. The total output of these commodities is given and the arrangements for supervising their production and organising their marketing are described in the chapter "Dairying Industry" of this Year Book.

## MARGARINE.

The next table shows the total production of margarine in margarine, meat preserving, and other factories in New South Wales during 1945-46 and selected earlier years:—

TABLE 608.—Production of Margarine.

Items.		1928-29.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Table Margarine ...	lb.	*	4,492,247	17,127,054	20,446,492	27,179,330	15,167,113
	£	*	162,692	867,976	1,043,543	1,435,733	758,896
Other Margarine ...	lb.	*	22,475,035	29,834,124	34,493,539	30,834,585	25,313,121
	£	*	566,627	782,677	901,625	842,900	726,931
Total Produced ...	lb.	16,627,959	26,967,332	46,961,178	54,940,031	58,013,915	40,480,234
	£	551,014	729,319	1,650,653	1,945,168	2,278,633	1,485,827

\* Not available.

The demand for margarine as a substitute for butter was partly responsible for the great increase in the quantity of margarine produced during the war years. Output rose to a record level of 58,013,915 lb. in 1944-45 but declined to 40,480,234 lb. (143 per cent. above 1928-29 and 50 per cent. above 1938-39) in 1945-46.

## MEAT AND FISH PRESERVING.

The following table contains particulars of the operations of meat and fish preserving factories during 1938-39 and each of the last five years. These factories produce quantities of margarine and edible fats in addition to dehydrated meat, preserved meat and fish, and various types of meat and fish pastes and extracts.

TABLE 609.—Meat and Fish Preserving Factories.

Items.		1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...		6	8	10	14	13	12
Average Number of Employees*		211	920	1,032	1,171	993	946
Total Horse-power installed ...		246	738	822	1,050	1,043	1,237
Value of Land and Buildings	£	62,471	93,239	100,989	151,063	186,820	134,886
Value of Plant and Machinery	£	19,307	94,143	136,153	134,582	114,215	105,254
Salaries and Wages paid...	£	39,183	197,931	260,552	329,312	290,393	264,169
Value of Fuel and Power	£	5,159	19,379	28,862	53,178	44,834	35,187
Value of Materials used ...	£	119,918	1,018,547	1,279,097	2,038,126	1,877,718	1,462,444
Value of Output ...	£	158,311	1,360,510	1,820,202	2,828,833	2,497,302	2,001,593
Value of Production ...	£	33,234	322,584	612,243	737,529	574,750	473,962

\* Average over whole year.

The total production of preserved and dehydrated meat in New South Wales factories during 1938-39 and each of the last five years is shown below. A small proportion of the preserved meat is the product of bacon factories.

TABLE 610.—Meat Preserved and Dehydrated.

Items Produced.		1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Preserved Meat ...	lb.	3,377,960	21,418,040	23,962,491	29,075,208	27,830,484	26,542,794
	£	124,251	1,016,602	1,166,149	1,783,473	1,742,202	1,458,133
Dehydrated Meat...	lb.	*	*	*	4,970,557	2,347,638	663,124
	£	*	*	*	623,936	368,554	88,554

\* Not available.



The quantity of preserved meat produced annually varied little from 5,000,000 lb. for several years prior to 1938-39, when it declined to 3,377,960 lb. Output rose substantially during the war years, largely to satisfy the requirements of the services, reached a record of 29,075,208 lb. in 1943-44, and then fell slightly to 26,542,794 lb. in 1945-46, when it was eight times greater than in 1938-39. The dehydration of meat was a war-time measure; production declined from 4,970,557 lb. in 1943-44 to 658,124 lb. in 1945-46.

BREWERIES.

In 1945-46 six establishments in the State were classed as breweries, and four were within the metropolitan boundaries. The tendency to concentration in large units has been very marked in this industry.

TABLE 611.—Breweries.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments	6	6	6	6	6	6
Average Number of Employees*	1,009	1,125	1,081	1,065	1,112	1,162
Total Horse-power Installed	9,936	11,464	11,476	11,479	11,487	11,499
Value of Land and Buildings	£ 949,643	1,165,111	1,166,092	1,168,014	1,168,261	1,168,491
Value of Plant and Machinery	£ 782,142	808,842	758,823	705,568	653,179	614,491
Salaries and Wages paid...	£ 310,682	368,867	362,638	362,744	397,676	426,156
Value of Fuel and Power used	£ 85,850	98,024	92,554	99,543	104,367	108,736
Value of Materials used ...	£ 1,040,086	1,508,752	1,223,384	1,292,586	1,358,124	1,337,219
Value of Output	£ 3,492,243	4,492,784	3,625,178	3,784,024	3,920,889	3,836,829
Value of Production	£ 2,366,307	2,886,008	2,309,240	2,391,895	2,458,398	2,390,874
Materials Treated—						
Malt ... .. bus.	1,059,628	1,293,395	1,034,047	1,098,320	1,134,695	1,132,611
Hops ... .. lb.	931,922	976,871	809,178	839,366	868,863	811,001
Sugar ... .. tons	6,922	8,770	8,050	8,411	8,486	8,428
Ale, Beer, Stout produced†	gals. 33,890,023	43,093,051	36,495,590	38,224,792	39,033,673	30,073,817

\* Average over whole year.

† Excluding waste beer.

The rate of excise duty on locally manufactured beer has been 4s. 7d. per gallon since September, 1942.

Information relative to the consumption of beer in New South Wales is shown in the chapter "Social Condition" of this Year Book.

TOBACCO FACTORIES.

Eight tobacco factories were in operation during the year 1945-46, all except one within the metropolitan area. The industry is highly organised, and the bulk of the output is produced in three large establishments. Conditions of employment in the tobacco factories are maintained at a high standard.

Most of the tobacco leaf treated in New South Wales factories is imported from the United States of America. In 1945-46 only 16 per cent. was Australian leaf, mostly purchased from Queensland as very little is grown in New South Wales. Large quantities of tobacco and cigarettes are exported, mainly to other States; during the war years, exports oversea increased considerably to supply the Services.

The following table shows details of the operations of tobacco factories in New South Wales in 1938-39 and each of the last five years:—

TABLE 612.—Tobacco Factories.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	8	7	8	8	8	8
Average Number of Employees*	3,108	3,074	3,125	2,969	3,012	2,997
Total Horse-power installed ...	6,104	7,027	6,199	6,341	5,799	5,761
Value of Land and Buildings £	645,706	619,785	615,318	605,989	588,793	588,640
Value of Plant and Machinery £	625,774	548,111	526,552	493,848	458,120	432,248
Salaries and Wages paid... £	623,799	678,328	749,835	724,912	712,209	749,800
Value of Fuel and Power used £	23,846	27,104	41,601	30,033	30,071	36,547
Value of Materials used ... £	4,806,898	5,594,405	6,216,947	6,922,959	7,068,047	7,022,802
Value of Output ... ... £	6,039,442	7,423,873	8,315,718	8,529,942	8,384,985	8,260,290
Value of Production ... ... £	1,208,698	1,802,364	2,057,170	1,576,900	1,286,867	1,200,941
Materials treated—						
Australian Leaf ... lb.	2,640,849	2,769,360	2,696,316	2,558,445	2,391,375	2,448,691
Imported Leaf ... lb.	10,882,129	12,310,466	13,638,496	13,328,032	12,850,741	12,682,604
Articles Produced—						
Tobacco ... ... lb.	10,755,820	11,954,970	13,106,766	11,978,090	11,258,655	11,548,326
Cigarettes ... ... lb.	4,496,428	5,273,636	5,615,025	5,931,319	5,870,132	5,524,816
Cigars ... ... lb.	†	†	†	†	†	†

\*Average over whole year. † Not available for publication—only a small quantity produced.

Information relating to the consumption of tobacco in New South Wales is given in the chapter "Social Condition" of this Year Book.

The excise duties imposed on tobacco, cigarettes, and cigars manufactured locally for home consumption have been increased substantially since 1938-39. The rates current since September, 1942 are: tobacco, a predominant rate of 10s. 11d. per lb., machine-made cigarettes, 20s. 9d. per lb., and hand-made cigars, 11s. 7d. per lb., less, in each case since November, 1943, a rebate of 4½ per cent.

#### SAWMILLS.

Sawmilling is an important industry in many parts of the State, the majority of the mills being situated in the forest areas. Besides general milling, moulding and planing and the cutting of wood-paving blocks are undertaken at some mills. In the metropolitan district, sawmills are conducted in connection with yards where imported timbers are treated and joinery work is done.

Details concerning the sawmilling industry at intervals since 1938-39 are as follow:—

TABLE 613.—Sawmills.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	435	556	582	585	605	645
Average Number of Employees* ...	4,981	5,665	5,431	5,474	5,733	6,277
Total Horse-power Installed ...	20,096	34,748	34,386	36,789	41,140	44,128
Value of Land and Buildings £	712,278	702,281	711,190	728,795	791,757	883,384
Value of Plant and Machinery £	631,702	692,606	717,705	748,154	802,225	935,096
Salaries and Wages Paid £	970,988	1,251,481	1,308,020	1,367,590	1,421,993	1,575,729
Value of Fuel and Power Used £	51,856	71,844	78,393	89,679	95,411	105,289
Value of Materials Used £	2,817,588	3,090,415	3,016,205	3,705,592	3,761,393	4,077,231
Value of Output ...	£ 4,464,421	5,183,285	5,162,679	5,996,901	6,235,561	6,792,094
Value of Production ...	£ 1,594,977	2,021,026	2,068,081	2,201,630	2,378,757	2,609,514
Logs Treated—						
Hardwood—						
Native ... ..cub. ft.	16,400,342	20,377,000	20,529,000	21,977,000	21,169,000	22,420,703
Imported† ... ..cub. ft.	90,524	295,000	18,000	105,000	58,000	117,170
Softwood—						
Native ... ..cub. ft.	6,514,209	12,797,000	11,411,000	11,314,000	9,701,000	9,208,070
Imported† ... ..cub. ft.	9,725,537	1,106,000	46,140	267,000	80,000	126,353
Sawn Timber Produced—						
Hardwood—						
Native ... ..sup. ft.	129,510,433	160,987,837	164,210,997	170,284,394	170,203,823	180,024,508
Imported† ... ..sup. ft.	767,511	2,972,399	164,520	1,099,493	595,892	1,025,681
Softwood—						
Native ... ..sup. ft.	49,840,052	95,916,091	85,806,168	88,750,933	75,769,327	72,082,499
Imported† ... ..sup. ft.	101,051,353	11,542,504	453,513	2,824,767	768,562	1,016,662
Total Sawn Timber ... ..sup. ft.	281,169,349	271,418,831	250,635,198	262,959,587	247,337,604	254,149,350

Average over whole year.

† Interstate and Oversea.

The quantity of sawn timber produced in the mills fell 10 per cent. from 281,169,349 sup. ft. in 1938-39 to 254,149,350 sup. ft. in 1945-46. During this period, the output of sawn hardwood timber rose about 40 per cent. from 130,277,944 sup. ft. to 181,050,189 sup. ft. and the output of sawn softwoods from native logs rose 45 per cent. from 49,840,052 sup. ft. to 72,082,499 sup. ft.; the production of sawn softwood timber from imported logs declined 98 per cent. from 101,051,353 sup. ft. to 1,016,662 sup. ft., largely because of world shortage of lumber. Between 1938-39 and 1945-46 the proportion of sawn softwood timber which was produced from imported logs declined from 67 to 1 per cent.

## RUBBER WORKS.

The demand for rubber goods in New South Wales is met to a large extent by local manufacturers. The next table contains particulars of the operations of rubber works (including tyre repairing and retreading establishments) during 1938-39 and each of the last five years:—

TABLE 614.—Rubber Works.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	96	96	95	102	104	118
Average Number of Employees* ...	3,538	4,140	3,489	4,005	3,814	3,990
Total Horse-power Installed ...	21,680	22,509	24,630	26,189	26,372	28,764
Value of Land and Buildings £	814,659	771,459	770,917	787,624	776,578	856,381
Value of Plant and Machinery £	537,440	499,989	489,867	497,563	478,263	495,034
Salaries and Wages Paid £	735,830	1,097,144	1,008,809	1,231,519	1,179,757	1,255,193
Value of Fuel and Power Used £	94,862	113,261	119,935	138,265	140,840	149,208
Value of Materials Used £	1,882,261	2,872,873	3,198,568	3,720,334	3,511,630	3,757,049
Value of Output† ...	£ 2,935,592	4,492,122	4,671,598	5,504,107	5,096,518	5,492,063
Value of Production† ...	£ 958,469	1,505,988	1,353,095	1,645,508	1,444,048	1,585,806
Crude Rubber Used ... lb.	16,262,116	16,686,684	14,753,168	14,777,619	11,898,909	11,295,312
Articles Produced—						
Rubber Hose ... ..ft.	5,517,879	9,623,920	5,022,235	4,032,793	6,319,241	9,820,496
Tyres ... ..No.	662,736	344,475	362,703	445,826	358,957	540,103
Goloshes and Rubber Shoes prs.	3,557,914	2,622,470	157,849	114,133	215,412	821,340

\* Average over whole year.

† See next paragraph.

The recorded value of output of the rubber works represents, for the most part, the value at which the products of the large establishments are transferred to their selling organisations.

### ELECTRICITY GENERATING STATIONS.

For the purpose of comparability, particulars of the electricity industry are confined to the generation of electricity in electricity generating stations, and exclude both the transmission and distribution of electricity and also the generation of electricity by factories solely for their own use. The value of output of the electricity industry is the amount received from the sale of electricity less the costs of transmission and distribution.

Production and supply of electric light and power has expanded rapidly in recent years, though hampered by shortage of equipment and the uncertainty of supplies and quality of coal. The particulars in the following table show the development of electricity generating stations (excluding factories generating electricity for their own use) between 1938-39 and 1945-46:—

TABLE 615.—Electricity Generating Stations.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46
Number of Establishments ...	106	96	96	102	102	100
Average Number of Employees*	2,072	2,315	2,446	2,521	2,566	2,849
Total Horse-power of Prime Movers installed ...	953,487	1,116,649	1,167,355	1,189,356	1,200,740	1,203,094
Value of Land and Buildings ...	£ 4,584,817	4,498,738	4,185,371	4,125,958	4,190,837	4,181,042
Value of Plant and Machinery ...	£ 11,695,870	12,246,865	11,639,096	11,277,284	11,024,215	10,874,564
Salaries and Wages paid... ..	£ 634,276	811,518	915,151	985,142	989,882	1,071,363
Value of Fuel and Power used ...	£ 1,363,608	2,027,890	2,242,533	2,412,047	2,631,643	2,692,513
Value of Materials used ...	£ 223,343	309,834	396,008	411,219	429,650	496,049
Value of Output ...	£ 5,719,029	7,379,960	7,933,738	8,208,762	8,582,574	8,749,030
Value of Production ...	£ 4,132,978	5,042,236	5,295,197	5,385,406	5,521,281	5,560,468
Coal used ... .. tons	1,162,997	1,450,450	1,527,303	1,559,777	1,674,888	1,695,575
Electricity generated 000 units	1,833,540	2,515,664	2,709,269	2,684,922	2,742,188	2,708,914

\* Average over whole year.

The Electricity Authority of New South Wales was appointed in 1946 to plan and co-ordinate electricity supplies throughout the State. The larger of the undertakings have been united in a grid to enable the interchange of electricity when necessary. In 1945-46 six of the electricity generating works were owned by the State Government and thirty-nine by local government bodies; 55 were privately-owned.

Large works in Sydney, Newcastle, and Lithgow, controlled by the Commissioner for Railways, supply electricity for transport and the railway and tramway workshops, and as well, supply current for industrial and domestic use. A State Government undertaking at Port Kembla supplies power to harbour and constructional works, etc. in the vicinity and to a number of towns along the South Coast and in the Southern Highlands. There is also a Government hydro-electric scheme based on the Burrinjuck Dam.

The largest of the electricity works owned by local government authorities is the Sydney County Council undertaking which supplies most consumers in the Metropolitan area. The operations of the local government undertakings are treated more fully in the chapter "Local Government" of this Year Book.

The next table contains an analysis of the disposal of the electricity generated in electricity generating stations and other New South Wales factories during 1938-39 and each of the last five years:—

TABLE 616.—Generation and Disposal of Electricity.

Source and Manner of Disposal.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Electricity Generating Stations—	000 units.	000 units.	000 units.	000 units.	000 units.	000 units.
Bulk Sales to large industrial concerns, railways and tramways, and for subsequent distribution*	1,171,702	1,315,807	1,575,138	1,585,221	1,636,225	1,613,165
Sales to Domestic and small Commercial and Industrial users and for Street Lighting	369,394	526,734	551,694	581,809	552,308	544,675
Used in Electricity Generating Stations	87,913	128,214	127,676	133,107	153,876	142,788
Used in own works outside generating stations ...	11,429	388,598	285,083	226,311	240,261	242,659
Lost, etc. ...	193,102	156,311	169,678	158,474	150,518	165,627
Total Electricity generated in Generating Stations	1,833,540	2,515,664	2,709,269	2,684,922	2,742,188	2,708,914
Other Factories—						
Electricity generated for own use	114,949	140,580	134,911	141,209	135,148	122,887
Total Electricity generated in N.S.W. Factories ...	1,948,489	2,656,244	2,844,180	2,826,131	2,877,336	2,831,801

\* Principally to Local Government Undertakings.

### GAS WORKS.

The gas works in 1945-46 consisted of one governmental concern, 20 country municipal or shire works, and 18 privately-owned.

Despite the substantial progress that has been made in the installation of electric plants for purposes of illumination, power, and cooking, the use of gas is increasing. The quantity of gas produced in New South Wales gasworks rose 40 per cent. from 10,896 million cub. ft. in 1938-39 to 15,311 million cub. ft. in 1945-46. The particulars in the following table show the development of gas-producing works during these years.

TABLE 617.—Gas Works.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number of Establishments ...	43	42	42	42	40	39
Average Number of Employees*	1,092	1,160	1,271	1,185	1,211	1,289
Total Horse-power installed ...	17,409	18,370	19,488	19,066	19,383	20,575
Value of Land and Buildings £	741,580	788,119	798,289	803,416	781,724	806,378
Value of Plant and Machinery £	3,219,493	2,965,082	3,119,315	3,191,816	3,254,366	3,323,226
Salaries and Wages paid... £	288,913	341,186	414,706	420,682	435,143	451,690
Value of Fuel and Power used £	207,891	240,343	291,216	325,232	336,348	360,811
Value of Materials used ... £	762,764	1,101,326	1,291,423	1,449,844	1,446,349	1,503,659
Value of Output ... £	2,327,850	3,085,279	3,447,320	3,577,340	3,574,655	3,905,536
Value of Production ... £	1,357,195	1,743,610	1,864,681	1,802,264	1,791,958	1,741,066
Coal used ... tons	578,127	689,468	719,023	754,434	771,706	795,961
Articles Produced—						
Gas† ... 000 cub. ft.	10,896,185	12,290,166	14,006,100	14,558,126	14,923,581	15,310,710
Coke ... tons	412,986	427,673	461,237	481,511	503,122	499,165
Sulphate of Ammonia tons	5,800	5,940	4,015	4,487	6,200	6,320

\* Average over whole year. † Includes gas lost and used in own factories.

In addition to the coke and sulphate of ammonia made in gas works, considerable quantities are made in other establishments in which coal is treated. The quantity of coke produced by all plants in 1945-46 was 1,470,149 tons.

## MINING INDUSTRY.

NEW SOUTH WALES contains extensive mineral deposits of great value and variety. Coal was discovered as early as 1796, though under the industrial conditions prevailing at that time its importance was not fully realised. World-wide interest, however, was excited by the announcement in 1851 that gold had been discovered in New South Wales. The discovery attracted a rapid flow of immigration to the country and promoted the development of its resources. Since 1883 extensive silver-lead deposits have been mined at Broken Hill. Copper and tin deposits also were opened up. Coal and silver-lead have proved to be the richest sources of mineral production.

### STATISTICS OF MINES.

Statistics relating to the mining industry and summarised in this chapter are available from two sources:—

- (1) Returns as to employees, wages, value of machinery and plant, and total value of minerals *raised during the year* have been collected under the Census Act for each year since 1921. The value of output (as shown in Tables 618 to 620) is estimated *before* treatment;
- (2) Returns as to quantity and value of the principal metals and industrial minerals *won* during the year have been ascertained under the Mining Acts for many years. The values of minerals won (as shown in Tables 639 to 646) relate to the estimated value *after* treatment.

### MINES IN OPERATION.

The following statement is a summary of the particulars furnished by mine owners in returns under the Census Act regarding the mines in operation and the minerals mined during 1921 and later years. The figures are selected items and are not a complete record of either the income or expenditure of the undertakings concerned. Particulars for the year 1921 include figures relating to quarries held under mining title; in other years details of quarries are excluded. Available information regarding quarrying is shown later in this chapter.

TABLE 618.—Comparative Statistics—All Mines, 1921 to 1946.

Year.	Mines in Operation.	Persons Employed (average).	Salaries and Wages. *	Value of—			
				Land, Buildings, etc.	Machinery and Plant.	Materials and Fuel Used, etc.	Output. (Minerals Raised.)
	No.	No.	£	£	£	£	£
1921 ... ..	493	25,612	6,430,988	3,428,735	8,118,823	1,776,320	10,191,975
1929 ... ..	369	26,562	5,242,393	3,981,000	7,939,024	1,346,519	8,832,874
1931 ... ..	431	18,370	3,838,763	3,724,217	7,453,590	962,370	5,706,425
1936 ... ..	592	18,890	4,895,850	3,666,585	7,378,698	1,176,732	8,429,114
1939 ... ..	597†	22,506	6,592,871	3,815,465	8,363,440	1,777,797	11,466,916
1940 ... ..	583†	22,886	6,028,288	3,721,381	8,504,471	1,865,929	11,024,079
1941 ... ..	560†	22,481	7,586,272	3,764,438	8,526,267	2,154,513	13,604,975
1942 ... ..	458†	21,695	8,264,210	3,744,088	8,219,426	2,373,670	14,652,530
1943 ... ..	386†	21,764	8,565,985	3,685,705	7,954,182	2,573,057	14,896,805
1944 ... ..	360	21,390	8,506,897	3,700,488	7,872,139	2,679,312	15,236,026
1945 ... ..	359	21,452	8,078,293	3,679,771	7,942,351	2,761,215	15,185,431
1946 ... ..	351	22,146	9,363,565	3,625,302	7,909,787	3,095,106	18,740,036

\* Subject to deduction for Explosives—see Table 621.

† Revised.

In this table the value of minerals won by fossickers, which amounted to £31,491 in 1945 and £33,291 in 1946, is included in the output, but fossickers are not included in the number of persons employed in mining. The number of fossickers is shown in Table 623.

The cost of replacing tools worn out each year and of repairing plant, machinery, etc. is included with the value of materials and fuel used, but many other costs and overhead charges are not included.

Coal mining is the principal mineral industry of New South Wales; in the last five years the annual output of coal represented 62.6 per cent. of the total value of output of minerals.

A comparative summary relating to coal mines is shown below; particulars of shale mines (except in 1921) are not included here, but are shown in Table 620:—

TABLE 619.—Comparative Statistics—Coal Mines, 1921 to 1946.

Year.	Mines in Operation.	Persons Employed (average).	Salaries and Wages. *	Value of—			
				Land, Buildings.	Machinery and Plant.	Materials and Fuel Used.	Output, (Minerals Raised.)
	No.	No.	£	£	£	£	£
1921 ... ..	143	20,973	5,703,999	3,222,721	6,636,857	1,469,578	9,036,474
1929 ... ..	180	22,470	4,053,746	3,778,955	7,127,140	824,940	6,294,870
1931 ... ..	169	15,522	3,222,379	3,541,988	6,736,886	654,319	4,441,335
1936 ... ..	160	13,515	3,492,308	3,465,285	6,399,424	613,305	4,920,908
1939 ... ..	172†	16,144	4,659,229	3,405,206	6,584,637	959,947	7,027,035
1940 ... ..	163†	16,777	4,047,568	3,295,221	6,690,770	936,218	6,360,541
1941 ... ..	152†	16,812	5,343,745	3,347,127	6,701,158	1,213,869	8,458,352
1942 ... ..	138†	16,634	6,318,215	3,309,484	6,520,904	1,447,827	9,738,756
1943 ... ..	125†	16,808	6,447,726	3,274,995	6,512,920	1,503,323	9,788,787
1944 ... ..	137	16,839	6,443,890	3,299,088	6,433,572	1,634,621	9,761,304
1945 ... ..	143	17,020	5,968,680	3,289,487	6,530,015	1,655,406	9,451,930
1946 ... ..	144	17,008	6,447,927	3,171,205	6,203,985	1,888,982	10,534,014

\* Subject to deduction for explosives—see Table 621.

† Revised.

Apart from coal mining, the Broken Hill silver-lead field is the most important source of mineral output in the State. Gold-mining decreased between 1920 and 1930, but revived subsequently and contributes materially to the value of mineral production.

Statistics relating to mines other than coal mines are summarised below; shale mines are included, except in 1921:—

TABLE 620.—Comparative Statistics—Mines other than Coal Mines, 1921 to 1946.

Year.	Mines in Operation.	Persons Employed (average).	Salaries and Wages. *	Value of—			
				Land, Buildings.	Machinery and Plant.	Materials and Fuel Used.	Output, (Minerals Raised.)
	No.	No.	£	£	£	£	£
1921 ... ..	350	4,639	726,989	206,014	1,481,966	300,742	1,155,501
1929 ... ..	189	4,092	1,188,647	202,045	811,884	521,579	2,538,004
1931 ... ..	262	2,848	616,384	182,229	716,704	308,051	1,265,090
1936 ... ..	432	5,375	1,403,542	201,300	979,274	503,427	3,508,206
1939 ... ..	425	6,362	1,933,642	410,259	1,778,803	817,850	4,439,881
1940 ... ..	420	6,109	1,980,720	426,160	1,813,701	929,711	4,663,538
1941 ... ..	408	5,669	2,042,527	417,311	1,825,109	940,644	5,146,623
1942 ... ..	320	5,061	1,945,995	434,604	1,698,522	925,843	4,913,774
1943 ... ..	261	4,956	2,118,259	410,710	1,441,262	1,069,734	5,108,018
1944 ... ..	223	4,551	2,063,007	401,400	1,438,567	1,044,691	5,474,722
1945 ... ..	216	4,432	2,109,613	390,284	1,412,336	1,105,809	5,733,501
1946 ... ..	207	5,138	2,915,638	454,097	1,765,802	1,206,124	8,205,122

\* Subject to deduction for explosives—see Table 621.

Salaries and wages shown in the foregoing tables represent gross earnings which were subject to deduction for explosives purchased by employees from the mine owners as follows:—

TABLE 621.—Value of Explosives Sold to Miners, 1929 to 1946.

Year.	Coal Mines.	Other Mines.	All Mines.	Year.	Coal Mines.	Other Mines.	All Mines.
	£	£	£		£	£	£
1929	95,221	43,161	138,382	1941	108,393	99,763	208,156
1931	98,767	30,605	129,372	1942	116,807	93,807	210,614
1936	110,321	52,911	163,232	1943	109,070	88,758	197,828
1938	110,360	86,491	196,860	1944	106,581	81,399	187,980
1939	117,724	91,734	209,458	1945	95,498	73,597	169,095
1940	99,873	98,736	198,609	1946	97,590	107,783	205,373

In coal mines the materials used included timber valued at £324,296 in 1945 and £352,076 in 1946. The value of fuel used in these years was £356,040 and £392,563, respectively.

In other mines the value of timber used was £277,773 in 1945 and £274,714 in 1946; the value of fuel was £254,021 and £271,882.

The value of fuel consumed in the mines in the last four years, with details as to coal and electricity, is shown below:—

			1943.	1944.	1945.	1946.
Coal—tons	...	...	222,755	211,996	202,019	198,750
Value	£	...	197,485	194,414	189,888	192,489
Electricity—£	...	...	377,164	344,380	354,709	397,454
Total fuel—£	...	...	626,949	594,532	610,061	664,445

## MINES IN DIVISIONS.

Particulars of mines in operation in 1946 in the various division of the State are shown in the following table:—

TABLE 622.—Mines in Division, 1946.

Division.	Mines in Operation.	Persons Employed (average).	Salaries and Wages.	Value of—		
				Land, Buildings, Machinery and Plant.	Materials and Fuel Used.	Output.
	No.	No.	£	£	£	£
North Coast ... ..	9	133	36,305	46,954	25,753	144,089
Hunter and Manning ... ..	96	11,184	4,295,361	7,150,015	1,286,144	7,088,446
South Coast ... ..	39	3,848	1,335,042	1,306,717	339,211	2,010,463
Northern Tableland ... ..	77	372	63,732	160,112	36,167	166,873
Central Tableland ... ..	49	2,226	881,646	1,284,380	305,907	1,506,845
Southern Tableland ... ..	5	378	180,752	225,688	84,494	405,439
North-western Slope ... ..	10	150	59,107	57,226	22,188	101,691
Central-western Slope ... ..	6	16	716	1,506	302	2,405
South-western Slope ... ..	21	119	28,537	7,710	7,072	60,764
North and Central Plain ... ..	12	85	13,966	30,397	5,707	33,693
Riverina ... ..	9	41	12,511	48,733	8,560	35,922
Western Division ... ..	18	3,594	2,455,890	1,275,751	973,601	7,183,406
Total, New South Wales	351	22,146	9,363,565	11,595,089	3,095,106	18,740,036



The northern coalmines, with the exception of a few in the North-western Slopes division, are situated in the Hunter and Manning division, the southern are in the South Coast division and the Western in the Central Tableland. Broken Hill and Cobar mining districts are in the Western division, and the principal tin mines are in the Central Tableland division. The diagrammatic map at page 9 of this volume shows the location of the principal mining centres in the State.

## EMPLOYMENT IN MINING.

Mining leases and permits contain conditions as to the minimum number of men to be employed. The usual labour conditions in respect of mining leases of Crown lands and of leases or agreements to mine on private lands are as follow:—for coal, shale, mineral oils, petroleum, or natural gas, for first twelve months of term granted, 2 men to 320 acres, thereafter 4 men; for gold, 1 man to 10 acres throughout the full term; for other minerals, 1 man to 20 acres during the first year, thereafter 1 man to 10 acres. For dredging leases the prescribed labour is in the proportion of 7 men to 100 acres. The labour conditions may be suspended in cases where low prices for the products or other adverse circumstances affect the working of a mine.

The approximate number of men engaged in mining in various years since 1921 is indicated in the following statement. The number of miners is the sum of the average number employed at each mine in operation during the year. Separate particulars are shown in respect of "fossickers", as reported by the mining wardens in the various districts. These men work more or less intermittently, digging for gold or other minerals, washing alluvial deposits, picking over abandoned workings, or prospecting. The average output won by fossickers is small.

TABLE 623.—Average Number of Mine Workers, 1921 to 1946.

Particulars.	1921.	1931.	1936.	1939.	1941.	1944.	1945.	1946.
Mine Workers—								
Coal ... ..	20,784	15,522	13,515	16,144	16,812	16,839	17,020	17,008
Shale ... ..	189	62	.....	57	175	193	153	156
Gold ... ..	900	520	1,561	1,341	917	295	306	576
Silver, Lead, Zinc ... ..	2,035	1,755	3,022	3,786	3,276	2,913	2,915	3,551
Tin ... ..	826	229	520	790	881	608	553	475
Other Metals ... ..	878*	148	50	134	185	346	311	191
Other Minerals ... ..		134	222	254	235	191	194	189
Total ... ..	25,612*	18,370	18,800	22,506	22,481	21,390	21,452	22,146
Fossickers—								
Gold ... ..	52	8,767	3,827	2,262	1,305	410	422	418
Tin ... ..	343	687	1,340	835	775	403	354	343
Other ... ..	55	667	147	162	53	98	77	112
Total ... ..	450	10,111	5,314	3,259	2,133	911	883	873

\* Includes workers in quarries held under mining title, excluded in later years.

The number of men engaged in coal mining increased by 1,316 in 1939 and by 864 between 1939 and 1946. The number of gold miners declined from 1,341 in 1939 to 295 in 1944 and increased again to 576 in 1946. In all branches of mining the decrease was 1,116 miners between 1939 and 1944, but in 1946 the number was within 360 of the total in 1939.

The average number of miners in 1946 was 22,146, including coal 17,008, shale 156, gold 576, silver, lead, zinc 3,551, tin 475, other 380; fossickers numbered 873.

Additional information regarding persons engaged in coal and other mines is shown in the following statement. The figures show the number employed on the last full working day in each year:—

TABLE 624.—Employees in Mines, Above and Below Ground, 1936 to 1946.  
(On Last Working Day in Year.)

Year.	Coal Mines.				Other Mines.			
	Working Proprietors.	Employees above ground.	Employees below ground.	Total.	Working Proprietors.	Employees above ground.	Employees below ground.	Total.
1936 ...	244	3,141	10,484	13,869	702	1,639	3,011	5,352
1937 ...	254	3,393	11,046	14,693	687	1,975	3,506	6,168
1938 ...	244	3,766	11,821	15,831	584	1,800	3,332	5,716
1939 ...	207	3,766	12,440	16,413	660	1,790	3,628	6,078
1940 ...	113	4,194	12,802	17,109	675	1,795	3,489	5,959
1941 ...	100	4,086	13,005	17,191	592	1,678	2,732	5,002
1942 ...	75	3,991	12,786	16,852	444	1,389	2,801	4,634
1943 ...	67	4,341	12,971	17,379	401	1,348	3,083	4,832
1944 ...	73	4,388	12,778	17,239	378	1,155	2,816	4,349
1945 ...	75	4,445	12,694	17,214	384	1,195	3,037	4,616
1946 ...	78	4,744	12,617	17,439	319	1,347	3,895	5,561

Approximately 93 per cent. of employees in mines in New South Wales are adult men and only 7 per cent. are youths under 21 years of age. The respective numbers working above and below ground (not including working proprietors) on the last full working day of 1945 and 1946 were as follow:—

TABLE 625.—Employees in Mines—Age Groups, 1945 and 1946.

Men Employed on Last Full Working Day in Year.	1945.			1946.		
	Coal Mines.	Other Mines.	Total.	Coal Mines.	Other Mines.	Total.
Under Age 21—						
Above Ground ... ..	556	39	595	530	53	583
Below Ground ... ..	1,058	65	1,123	860	86	946
Total under age 21 ...	1,614	104	1,718	1,390	139	1,529
Over Age 21—						
Above Ground ... ..	3,889	1,156	5,045	4,214	1,294	5,508
Below Ground ... ..	11,636	2,972	14,608	11,757	3,809	15,566
Total over age 21 ...	15,525	4,128	19,653	15,971	5,103	21,074
Grand Total ... ..	17,139	4,232	21,371	17,361	5,242	22,603

In 1946 there were 530 employees under age 21 years above ground and 860 under ground in coal mines, and 53 above ground and 86 below ground in other mines.

The employment of boys under 16 years of age and of women and girls in or about a mine is prohibited, and restrictions are placed upon the employment of youths.

## MINING MACHINERY.

The value of the machinery used in connection with mining in New South Wales during the year 1946 was £7,969,787, viz. coal mines £6,203,985, metalliferous mines, £1,564,938, and other mines, £200,864. The value in various years since 1931 is shown below:—

TABLE 626.—Value of Mining Machinery, 1931 to 1946.

Year.	Coal Mines.	Metalliferous Mines.	Other Mines.	Total.
	£	£	£	£
1931 ...	6,736,886	699,679	17,025	7,453,590
1936 ...	6,399,424	948,732	30,542	7,378,698
1939 ...	6,584,637	1,743,763	35,040	8,363,440
1940 ...	6,690,770	1,740,087	73,614	8,504,471
1941 ...	6,701,158	1,744,419	80,690	8,526,267
1942 ...	6,520,904	1,612,274	86,248	8,219,426
1943 ...	6,512,920	1,340,527	100,735	7,954,182
1944 ...	6,433,572	1,306,641	131,926	7,872,139
1945 ...	6,530,015	1,286,754	125,582	7,942,351
1946 ...	6,203,985	1,564,938	200,864	7,969,787

The value of the machinery used in mining for the various metals during 1946 was as follows:—gold, £467,812; silver, lead and zinc, £905,538; tin, £139,098; other metals, £52,490.

The following statement shows separately the value of the plant used in actual mining operations, that is, in winning and weighing the minerals, hauling them to the surface, ventilating the mines, etc., and the value of the conveyance plant for transporting the minerals from the surface to wharf or railway:—

TABLE 627.—Value and Purposes of Mining Machinery, 1926 to 1946.

Year.	Machinery in Coal Mines used for—			Machinery in Other Mines used for—			Total Value of Mining Machinery.
	Mining Operations.	Transporting Minerals to Wharf or Railway.	Other Machinery.	Mining Operations.	Transporting Minerals to Wharf or Railway.	Other Machinery.	
	£	£	£	£	£	£	£
1926 ...	4,524,850	2,880,051	342,238	796,461	110,820	82,488	8,736,908
1931 ...	3,954,708	2,528,302	253,876	680,616	14,531	21,557	7,453,590
1936 ...	3,832,433	2,317,492	249,499	917,947	11,647	49,680	7,378,698
1939 ...	3,971,479	2,344,695	268,463	1,537,385	14,640	226,778	8,363,440
1940 ...	4,183,339	2,242,159	265,272	1,590,117	17,967	205,617	8,504,471
1941 ...	4,273,404	2,106,341	321,413	1,487,980	20,516	316,613	8,526,267
1942 ...	4,124,908	2,065,762	330,234	1,248,128	40,954	409,440	8,219,426
1943 ...	4,111,081	2,061,462	340,377	1,023,706	32,984	384,572	7,954,182
1944 ...	4,088,015	2,024,618	320,939	1,019,691	51,060	367,816	7,872,139
1945 ...	4,229,924	1,979,357	320,734	1,006,710	50,069	355,557	7,942,351
1946 ...	4,097,499	1,695,220	411,266	1,304,028	57,471	404,303	7,969,787

In the coal mines, the value of the machinery employed in mining operations in 1946 represented 66 per cent. of the total value and 27 per cent. was used for transporting the minerals from the surface of the mine to a wharf or railway station. In other mines 75 per cent. was used in mining operations and only 3 per cent. in transporting minerals. In some cases mine owners have constructed railway lines for the purpose of connecting the mines with the State railway system or with wharves.

Particulars of the average horse-power of engines used for operating mining machinery are shown below:—

TABLE 628.—Horse-power of Engines—Average Used in Mines, 1931 to 1946.

Year.	Coal Mines.			Other Mines.			Total, Engines all Mines.
	Steam Engines.	Electric Engines.	Other Engines.	Steam Engines.	Electric Motors.	Other Engines.	
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
1931 ...	49,436	22,907	86	3,350	1,528	494	77,801
1936 ...	35,710	26,676	264	6,111	3,724	3,041	75,526
1939 ...	35,749	29,971	723	7,406	14,639	3,929	92,417
1940 ...	35,989	35,459	719	7,270	14,926	4,578	98,941
1941 ...	33,138	36,067	1,027	7,608	12,217	3,468	93,525
1942 ...	31,781	37,462	938	6,317	12,546	2,971	92,015
1943 ...	31,286	40,753	745	6,242	11,800	2,862	93,688
1944 ...	31,426	40,170	1,141	6,481	11,637	3,309	94,164
1945 ...	31,337	43,103	645	5,580	12,370	3,380	96,415
1946 ...	31,274	47,238	1,368	4,980	16,168	4,001	105,029

The total rated capacity of mining machinery in 1946 amounted to 161,348 horse-power, viz. 127,980 horse-power in coal mines and 33,368 horse-power in other mines.

#### COAL.

A description of the coal measures of New South Wales was published on pages 669 and 670 of the Year Book for 1937-38.

#### WAR-TIME CONTROL OF COAL MINING INDUSTRY.

An outline of the measures taken under National Security (Coal) Regulations to ensure adequate war-time supplies of coal throughout Australia, and under National Security (Coal Mining Industry) Regulations for the prevention and settlement of industrial disputes in that industry, is given at page 580 of the Year Book for 1941-42 and 1942-43. There also a brief account of the Coal Production (War-time) Act, 1944 appears. Control of the industry remained with the Coal Commissioner under that Act until 1st March, 1947, when the relevant section of the Coal Industry Acts, 1946 came into operation in New South Wales.

#### COAL INDUSTRY ACTS, 1946.

Parallel Coal Industry Acts enacted by agreement between the Commonwealth and New South Wales Governments were assented to on 15th August and 25th September, 1946. A Joint Coal Board, comprising a chairman and two other members appointed for a maximum term of seven years, has been set up to regulate the coal industry in New South Wales and to administer the measures. In matters of policy the Board is subject to direction by the Prime Minister in agreement with the Premier of New South Wales.

The powers of the Joint Coal Board are very wide. The Board is to ensure that sufficient New South Wales coal for Australian and export requirements is produced, that coal resources are conserved and developed, and that coal is used economically and distributed to best advantage. To that end it may give directions as to methods of mining (including mechanisation), grading and marketing, regulate prices of coal and profits in the industry, regulate employment (with power to exclude unsuitable persons), recruitment and training in the industry, and take measures to

promote the health, safety, and welfare of mine-workers and toward the social and economic advancement of coal-mining communities. Workers' compensation insurance schemes may be established by the Board in which employers may be compelled to insure. The Board also may foster and undertake research activities, afford technical assistance to the industry, and make advances to assist in the establishment, development, and operation of coal mines and related enterprises. Coal may be acquired, held, and sold by the Board, which also may take control of, or acquire and operate any coal mine, mining plant, etc. It has power to establish new coal mines, land for which it may obtain by purchase, or with the approval of the Prime Minister and the Premier, by appropriation or resumption with compensation.

Administrative costs of the Board are to be borne equally by the Commonwealth and New South Wales Governments. The State also will pay, up to £70,000, one pound for each pound contributed each year by the Commonwealth, to the Welfare Fund established under the Act in 1947. All other welfare charges and other expenses are to be met by the Commonwealth, including subsidies and losses from production and trading activities. Provision of funds for advances and grants for capital purposes is the responsibility of the Commonwealth, which also may guarantee loans to the Board from the Commonwealth Bank.

#### *Coal Industry Tribunal.*

Under the Acts industrial matters affecting the coal industry are dealt with by a Coal Industry Tribunal, Local Coal Authorities and Mine Conciliation Committees. The Coal Industry Tribunal must be a practising barrister or solicitor of not less than five years standing, is appointed for a term of seven years, and has all the powers of the Arbitration Court or Chief Judge of the Court to consider and determine any industrial dispute or matter in the industry. The tribunal is required to act without regard to technicalities and legal forms, may make its own rules of procedure, and may appoint two assessors (one a Federation nominee and one a nominee of employers) to advise it in relation to a dispute. Except with leave of the tribunal (or in its jurisdiction, of a local coal authority), counsel, a solicitor or a paid agent may not appear at hearings. Matters deemed to be local matters may be referred by the tribunal to local coal authorities for settlement.

Local Coal Authorities are appointed for a term of three years by the tribunal. They have power to settle local disputes, may be required to report upon, and if so directed, to settle, any dispute or matter referred by the Tribunal, to report to the Tribunal on matters not covered by an award, and to keep the Tribunal advised of disputes and matters arising or likely to arise. Disputes affecting members of the Miners Federation may be referred by Local Coal Authorities to Mine Conciliation Committees for settlement. If the Joint Coal Board is of the opinion that a decision of a Local Coal Authority is likely to lead to industrial unrest in other localities, it may stay its operation and direct the Tribunal to review it. The Tribunal may re-hear the matter if of like opinion, or, after review, certify that the Authority's decision may stand.

Mine Conciliation Committees comprise equal numbers representing members of the Federation and employers and may be appointed for any mine by the Board. They may deal with grievances and matters affecting production at the mine and seek by conciliation to maintain harmonious

industrial relations. Where a Committee cannot agree, a dispute is to be referred to the Local Coal Authority, and other matters to the Joint Coal Board. Awards of the Tribunal or of Local Coal Authorities over-ride inconsistent awards or orders of the Court or other tribunals with jurisdiction in the coal industry.

*Advances to Assist Operation and Development of Collieries.*

Up to 30th June, 1947 advances totalling £174,602, of which £53,602 was outstanding, had been made under National Security Regulations and the Acts which supersede them to controlled collieries and to mine-owners to assist in the operation and development of mines. In addition, plant to the value of £7,430, of which £1,041 was outstanding, had been purchased for re-sale to mine-owners under hire purchase agreements, and the sum of £19,696 had been contributed toward the cost of re-opening a New South Wales colliery that had been sealed down following a fire.

*Controlled Collieries.*

The Commonwealth Coal Commissioner assumed control of two New South Wales collieries in 1944 (one of which was de-controlled on 31st March, 1947), under powers conferred by the Coal Production (War-time) Act, 1944. Price stabilisation subsidy is not payable in respect of these mines. Amounts paid to 30th June, 1947 to the owners in reimbursement of losses and as compensation for loss of profits totalled £154,635.

*Commonwealth Board of Inquiry on Coal Mining Industry.*

In January, 1945, the Commonwealth Government appointed a Board of Inquiry to report upon the coal-mining industry in relation to such matters as production, mining methods and conditions, mechanisation, post-war employment and control of production and marketing, absenteeism and stoppages, industrial conciliation and arbitration, health and safety of employees, welfare schemes and pensions. The Board consisted of a Judge of the Supreme Court of New South Wales, as chairman, and two members representing the mine-owners and the employees respectively.

Its proceedings were suspended late in 1945, when a member (who later resigned) became ill, and on 9th March, 1946 the chairman was appointed a sole Commissioner to furnish a report upon the information before the Board, which he did on 13th March, 1946.

The report showed that many coal mines were faced with financial difficulties. In the Commissioner's view, the industry was under-mechanised, existing mechanical equipment was used insufficiently, and mines were not worked economically because of obstruction. Excessive absenteeism and poor discipline amongst workers, adherence to the "contract system" of hewing coal and to the "seniority system", and restrictive "customs" were regarded by him as factors seriously prejudicing the successful operation of the mines. He found need for improvement in methods of recruitment and training of mine workers and officials, working conditions and amenities in mines, and the living conditions (including housing) in mining communities; considered the State pension scheme for mine workers to be actuarially unsound, and examined, but was unable to sustain, claims for nationalisation as the remedy for the industry's ills.

Dealing with the question of post-war control of the production and marketing of coal, he recommended the constitution of a Federal authority with wide powers; suggested use of a bounty system, so applied as to foster greater efficiency, to give the industry the financial assistance it needed

under present conditions; and indicated the legislative changes considered necessary to secure improved and more stable labour relations in the industry.

#### *State Coal Mine.*

The State Coal Mine was opened at Lithgow, in the Western district, in September, 1916. The capital expenditure to 30th June, 1945 was £592,711, but by proclamation in March, 1945 the capital indebtedness to the Treasury was fixed at £310,000, applying as from 11th May, 1933. At 30th June, 1946, the mining property, including developmental work, machinery, etc. was valued at £337,082. During 1945-46 the sale of coal, 339,195 tons, realised £292,311 and operations resulted in a loss of £241, after charging interest on capital debt, £11,431 and contribution to sinking fund for debt redemption, £1,716. The average number of employees was 393 in 1939, and increased steadily to 487 in 1945 and 492 in 1946.

#### PRODUCTION OF COAL.

The Commissioner who reported in 1946 on the coal industry in terms of reference to the Commonwealth Board of Inquiry (see page 680) estimated that an annual output of about 14,500,000 tons of coal from existing underground and open cut mines in New South Wales might be practicable with proper mechanisation and economical methods of working coal. At that time he estimated the Australian demand for New South Wales coal, other than for export, at about 12,000,000 tons annually. The maximum output of coal in this State was 12,236,200 tons in 1942. Since that year, production from open cut mining has been developed and reached 750,153 tons in 1946.

The following table shows the *gross* quantity and value of coal raised in New South Wales to the close of 1946 as recorded by the Department of Mines, the total production being 501,744,976 tons, valued at £286,667,563. Particulars of production in each coal mining district and the development of open-cut mining in recent years are illustrated below:—

TABLE 629.—Coal Raised in New South Wales to 31st December, 1946.

Period.	Coal Raised (gross) including Open Cut.						
	Northern District.	Southern District.	Western District.	Total, New South Wales.			
				Mined Under-ground.	From Open Cuts.	Total Quantity.	Value at Pit Top.
To 1873 ...	tons.	tons.	tons.	tons.	tons.	tons	£
1874-1900 ...	*	*	*	*	...	...	...
1901-10 ...	57,492,942	15,971,308	5,871,934	12,140,449	...	12,140,449	5,353,591
1901-10 ...	49,072,701	16,766,733	5,702,494	79,336,184	...	79,336,184	31,962,324
1911-20 ...	63,140,567	20,349,875	10,171,529	71,541,928	...	71,541,928	24,944,592
1921-25 ...	37,227,324	10,142,069	7,103,055	93,661,971	...	93,661,971	43,607,113
1926-30 ...	27,116,692	9,866,717	9,187,459	54,472,448	...	54,472,448	45,086,228
1931-35 ...	24,118,983	6,215,615	6,572,202	46,170,868	...	46,170,868	38,628,003
1936-40 ...	32,856,614	9,283,126	7,428,105	36,906,800	...	36,906,800	22,719,859
1941-46 ...	38,230,782	10,553,840	8,086,212	49,523,232	44,613	49,567,845	29,448,405
					885,173	56,870,834	44,928,570
1936 ...	6,197,554	1,626,143	1,375,769	9,199,466	...	9,199,466	5,126,850
1937 ...	6,674,362	1,880,440	1,496,717	10,051,519	...	10,051,519	5,823,469
1938 ...	6,294,213	1,831,408	1,445,300	9,570,930	...	9,570,930	5,603,842
1939 ...	7,365,981	2,160,717	1,669,134	11,195,832	...	11,195,832	6,768,659
1940 ...	6,324,504	1,784,418	1,441,176	9,505,485	44,613	9,550,098	6,125,585
1941 ...	7,801,123	2,242,490	1,632,085	11,699,080	66,618	11,765,698	8,265,881
1942 ...	8,300,356	2,303,071	1,632,792	12,181,415	54,804	12,236,219	9,472,363
1943 ...	7,854,173	2,175,935	1,498,785	11,469,247	59,646	11,528,893	9,290,095
1944 ...	7,363,484	2,040,453	1,698,201	10,922,188	179,950	11,102,138	9,206,063
1945 ...	6,821,646	1,791,891	1,624,349	9,713,731	524,155	10,237,886	8,694,168
1946 ...	7,698,854	1,765,710	1,751,971	10,466,382	750,153	11,216,535	9,582,985

\* Not available.

The production of coal from open cuts, by which coal is won after removal of the over-burden, began in the Western district in 1940, and continued in a relatively small way until 1943, after which expansion was rapid. In 1946, there were open cut mines at two points in the Western district near Lithgow, and two in the Northern district near Muswellbrook and Aberdare, and steps toward developing other open cuts were in progress. In 1946 about one in every sixteen tons of coal produced was taken from open cut mines, and nearly one-seventh of the output in the Western district was obtained by this method.

The quantity of coal raised exceeded 10,000,000 tons in each year from 1920 to 1927, and in three of them exceeded 11,000,000 tons. A prolonged cessation of work in the northern mines in 1929 and 1930 was followed by the general depression, and the output in 1931 was the lowest since 1904. As industry revived, production rose year by year from 1932 and again exceeded 10,000,000 tons in 1937. The mines were idle for six weeks in 1938 and for ten weeks in 1940 owing to industrial strife. The record in production in 1941 was surpassed in 1942 when 12,236,000 tons were raised. The output declined in each of the next three years, when there were industrial dislocations, to 10,238,000 tons in 1945, but rose again to 11,217,000 tons in 1946. The quantities of coal as stated in the foregoing table relate to gross production; the excess over saleable output consists of coal used as fuel in operating coal mines and miners' coal.

Approximately 66 per cent. of the coal is obtained from the northern coal-fields with the balance divided about equally between the southern and western fields. The *saleable* output and average value per ton in each district since 1936 are shown in the following table:—

TABLE 630.—Saleable Coal Raised in Districts, 1936 to 1946.

Year.	Northern District.		Southern District.		Western District.		Total, New South Wales.	
	Quantity.	Average Value per ton.	Quantity.	Average Value per ton.	Quantity.	Average Value per ton.	Quantity.	Average Value per ton.
	tons.	s. d.	tons.	s. d.	tons.	s. d.	tons.	s. d.
1936 ...	5,977,897	10 11	1,544,297	12 8	1,339,553	8 9	8,861,747	10 10
1937 ...	6,474,920	11 3	1,783,129	13 0	1,466,041	8 9	9,724,090	11 2
1938 ...	6,120,324	12 0	1,724,195	14 0	1,414,064	9 6	9,258,583	12 0
1939 ...	7,171,171	12 7	2,058,866	14 5	1,634,783	10 8	10,864,820	12 8
1940 ...	6,139,021	13 6	1,709,267	15 0	1,409,005	11 6	9,257,293	13 6
1941 ...	7,649,193	14 6	2,158,409	16 7	1,609,664	12 0	11,417,266	14 7
1942 ...	8,070,981	15 11	2,211,495	18 8	1,614,322	13 6	11,896,798	16 1
1943 ...	7,655,965	16 10	2,097,850	20 1	1,479,017	14 9	11,232,832	17 2
1944 ...	7,142,491	17 7	1,963,046	21 2	1,688,277	15 0	10,793,814	17 10
1945 ...	6,614,395	18 7	1,717,191	21 11	1,611,413	15 4	9,942,999	18 7
1946 ...	7,531,025	18 8	1,693,544	23 1	1,734,251	15 7	10,958,820	18 10



More than 55 per cent. of the output is drawn from tunnels, and the balance from shafts and from open cuts. Particulars regarding the quantity of coal cut by machinery are shown in Table 634.

The quantity of saleable coal produced from each of the principal coal seams in the years 1939 and 1943 to 1946 was as follows:—

TABLE 631.—Saleable Output of Coal from Principal Seams.

Seam.	1939.	1943.	1944.	1945.	1946.
Northern District—	tons.	tons.	tons.	tons.	tons.
Greta Seam ...	4,371,297	4,499,796	4,109,000	3,897,599	4,405,999
Borehole Seam ...	849,461	1,172,742	1,116,398	986,156	1,088,749
Victoria Tunnel Seam	956,464	1,039,253	876,068	741,702	878,664
Great Northern Seam	247,409	290,423	275,548	239,017	449,400
Wallarah Seam ...	410,909	288,982	329,838	290,245	314,754
Other Seams ...	348,953	364,769	435,639	459,676	393,459
Total ...	7,184,493	7,655,965	7,142,491	6,614,395	7,531,025
Southern District ...	2,058,866	2,097,850	1,963,046	1,717,191	1,693,544
Western District ...	1,634,783	1,479,017	1,688,277	1,611,413	1,734,251
Total, New South Wales	10,878,142	11,232,832	10,793,814	9,942,999	10,958,820

#### *Colliery Days Worked.*

The intermittency of operations in the coal-mining industry, due chiefly to industrial disputes, and in earlier years irregularity of orders, is indicated by the following table showing the weighted average number of days worked by coal mines in the main coal-mining districts in various years since 1913:—

TABLE 632.—Colliery Days Worked, 1913 to 1946.

Year.	Northern.	Southern.	Western.	Total, New South Wales.
	days.	days.	days.	days.
1913 ...	234	227	261	233
1917 ...	201	207	221	204
1921 ...	221	234	217	223
1925 ...	197	194	257	202
1929* ...	79	228	244	132
1936 ...	196	201	207	198
1937 ...	209	220	224	213
1938* ...	179	196	192	184
1939 ...	205	216	216	209
1940* ...	166	166	182	168
1941 ...	213	210	208	211
1942 ...	231	227	238	231
1943 ...	221	222	233	223
1944 ...	210	212	231	213
1945* ...	196	195	214	198
1946 ...	215	203	229	214

\* Extensive industrial disputes occurred in these years.

The maximum number of working days in a year until 1938 was approximately 274, but the average number of days worked has rarely approached this total. During 1939 the number of working days was reduced by the Federal Arbitration Court, and the maximum number for the year was 266. In 1940, when the reduction was operative during the whole year, the number was 244 days. Restrictions were imposed on annual holidays in

essential industries following the outbreak of war with Japan in December, 1941, and the maximum number of working days in coal-mining was 250 in 1941, 252 in 1942, 254 in 1943, 253 in 1944, and 247 in 1945. In 1946 there were 248 working days in the northern and 243 working days in southern and western districts.

The average number of days actually worked was low in 1938, in 1940 and in 1945, when there were prolonged dislocations due to industrial disputes. As a general rule the average number of days worked by the western mines is greater than in the cases of mines in northern and southern districts.

*Output of Coal per Man-day.*

"Coal raised per man-day" may be calculated on a number of alternative bases depending upon the facts which it is desired to elucidate.

The following estimates represent the only basis possible with statistics at present available. They are derived by multiplying the average annual number of employees in each mine (other than open cuts) by the number of days worked by the mine during the year and dividing the aggregate "man-days" so obtained into the total output for all mines (excluding open cuts).

The resultant figures of "Coal Raised Per Man-day" are approximations and must be read and defined consistently with the basis of calculation. The total "man-days" used as a divisor includes individual employees who were absent on days on which the mine worked, consequently the estimate of "Coal Raised Per Man-day" reflects, among other things, variations in the incidence of absenteeism.

Over the period shown the figures are comparable from year to year on the basis adopted. They should not be compared with figures of similar import for other countries without assurance that the bases adopted are comparable.

The approximate average output of coal per man-day, calculated in the manner indicated, is shown below for various years since 1913; particulars of open cut mines have been excluded:—

TABLE 633.—Coal Output per Man-day (Approximate).

Year.	Per Employee Below Ground.				Average For All Employees.			
	Northern.	Southern.	Western.	Total.	Northern.	Southern.	Western.	Total.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1913 ...	3.25	2.75	4.01	3.18	2.44	2.12	3.29	2.41
1917 ...	3.36	2.88	4.29	3.33	2.46	2.20	3.56	2.50
1921 ...	3.17	2.69	4.62	3.17	2.34	2.00	3.74	2.36
1925 ...	3.25	2.86	3.55	3.21	2.42	2.12	2.76	2.41
1929 ...	3.67	2.60	4.07	3.45	2.66	2.08	3.16	2.58
1933 ...	4.42	3.44	5.28	4.34	3.15	2.58	4.22	3.17
1936 ...	4.86	3.39	5.11	4.55	3.58	2.64	4.18	3.44
1937 ...	4.88	3.35	5.45	4.55	3.57	2.59	4.34	3.42
1938 ...	5.07	3.43	5.55	4.72	3.75	2.51	4.55	3.51
1939 ...	4.81	3.21	5.01	4.42	3.55	2.50	4.17	3.35
1940 ...	4.86	3.42	5.22	4.53	3.58	2.60	4.11	3.40
1941 ...	4.65	3.44	4.95	4.39	3.46	2.65	4.00	3.32
1942 ...	4.45	3.36	4.80	4.23	3.35	2.55	3.82	3.21
1943 ...	4.38	3.29	4.64	4.15	3.24	2.49	3.65	3.10
1944 ...	4.38	3.25	4.52	4.13	3.23	2.45	3.61	3.09
1945 ...	4.13	3.12	4.74	3.97	3.08	2.34	3.72	2.98
1946 ...	4.17	3.25	4.79	4.05	3.06	2.36	3.75	2.99

In considering fluctuations in the annual average output per man-day, due allowance must be made for the frequent changes occurring through the closure of old mines and the opening of new mines with varying efficiency, and for the increasing age of workings. After 1930 depressed trade and substantially reduced prices tended to divert production to the more economical workings, but during and since the war the effort has been to keep all mines in production.

*Coal Cut and Filled by Machinery.*

The number of machines used for cutting coal in 1946 was 232, viz. 163 operated by electricity and 69 by compressed air. Only in one year (1942) has the quantity of coal cut by machines in underground mines exceeded 5,000,000 tons, and it decreased absolutely and relatively in 1943, 1944 and 1945. In 1946 the quantity was 3,969,138 tons and the proportion was 37.6 per cent. of the total won underground, compared with 40.9 per cent. in 1942. Electrical tends to displace other power in the operation of coal-cutting machinery.

Machinery for filling coal was first used in 1935. By 1942 the quantity machine-filled reached 2,585,000 tons. After declining progressively to 2,168,184 tons in 1945 the quantity increased again to 2,494,785 tons in 1946.

TABLE 634.—Coal Cut and Filled by Machinery, 1911 to 1946.

(Open Cut Mines Excluded.)

Year.	Coal cut by Machinery.				Coal filled by Mechanical Means.
	Electricity.	Compressed Air.	Total.	Proportion of Output.	
	tons.	tons.	tons.	per cent.	tons.
1911 ...	2,075,000	563,000	2,638,000	30.4	...
1912 ...	1,667,000	662,000	2,329,000	21.5	...
1926 ...	1,201,000	1,056,000	2,257,000	20.7	...
1931 ...	842,000	536,000	1,378,000	21.4	...
1936 ...	1,804,000	666,000	2,470,000	26.8	134,500
1937 ...	2,036,000	752,000	2,788,000	27.7	301,300
1938 ...	2,088,000	634,000	2,722,000	28.4	619,500
1939 ...	2,887,000	707,000	3,594,000	32.1	1,101,400
1940 ...	3,319,000	373,000	3,692,000	38.7	1,332,100
1941 ...	4,014,490	697,859	4,712,349	40.1	2,142,400
1942 ...	4,260,090	744,921	5,005,011	40.9	2,585,000
1943 ...	3,965,020	452,842	4,417,862	38.5	2,514,114
1944 ...	3,645,491	453,736	4,099,227	36.9	2,329,899
1945 ...	3,171,778	388,940	3,560,718	36.7	2,168,184
1946 ...	3,613,943	355,195	3,969,138	37.6	2,494,785

*Disposal of Coal.*

The following statement shows the quantity and proportion of coal retained for local consumption, and the interstate and overseas exports in 1921 and later years. The bunker coal loaded in Sydney Harbour into interstate steamers in the years 1921 and 1926 is included in the table under

the heading "local consumption", because it was not distinguished in the records from the coal taken in that port by intrastate vessels. In this group is included also coal used in the coal mines, miners' coal, etc. which amounted to 428,873 tons in 1946.

TABLE 635.—Local Consumption and Export of N.S.W. Coal.

Year.	Retained for Consumption in N.S.W.†	Sent to other Australian States. ★	Total quantity consumed in Australia. †	Exported to Oversea Countries. ★	Total Production. †
	tons.	tons.	tons.	tons.	tons.
1921 ...	5,268,628	2,752,810	8,021,438	2,771,949	10,793,387
1926 ...	6,347,939	2,740,570	9,088,509	1,797,257	10,885,766
1931 ...	4,090,554	1,540,416	5,630,970	801,412	6,432,382
1932 ...	4,416,129	1,575,343	5,991,472	792,750	6,784,222
1933 ...	4,587,934	1,699,165	6,287,099	831,338	7,118,437
1934 ...	5,103,221	1,962,805	7,066,026	807,154	7,873,180
1935 ...	5,847,709	1,974,279	7,821,988	876,591	8,698,579
1936 ...	6,070,840	2,217,450	8,288,290	911,176	9,199,466
1937 ...	6,671,002	2,458,002	9,129,004	922,515	10,051,519
1938 ...	6,497,954	2,162,104	8,660,058	910,872	9,570,930
1939 ...	7,632,763	2,689,985	10,322,748	873,084	11,195,832
1940 ...	6,660,775	2,271,433	8,932,208	617,890	9,550,098
1941 ...	8,144,816	3,093,238	11,238,054	527,644	11,765,693
1942 ...	8,505,829	3,132,652	11,638,481	597,738	12,236,219
1943 ...	8,057,193	3,120,980	11,178,173	350,720	11,528,893
1944 ...	7,640,742	3,157,179	10,797,921	304,217	11,102,138
1945 ...	7,039,463	2,899,992	9,939,455	298,431	10,237,886
1946 ...	7,974,127	2,935,484	10,909,611	306,924	11,216,535

## Per cent. of Total.

1921 ...	48.8	25.5	74.3	25.7	100
1926 ...	58.3	25.2	83.5	16.5	100
1931 ...	63.6	23.9	87.5	12.5	100
1936 ...	66.0	24.1	90.1	9.9	100
1939 ...	68.2	24.0	92.2	7.8	100
1943 ...	69.9	27.1	97.0	3.0	100
1944 ...	68.8	28.4	97.2	2.8	100
1945 ...	68.8	28.3	97.1	2.9	100
1946 ...	71.1	26.2	97.3	2.7	100

\* Approximate, includes Ships' Bunkers, see Table 636.

† Quantities and percentages for years 1931 to 1944 revised since last issue.

Australian requirements have absorbed an increasing proportion of the coal produced. Oversea exports of coal represented more than one-fourth of the output in 1921, but this trade began declining preceding, and fell sharply during, the economic depression, showed little subsequent recovery, and latterly has tended to disappear.

*Purposes for which Coal was used.*

Full particulars are not available as to the purposes for which coal is used locally, but statistics of factories and railways with those of the export trade contain information which covers a large proportion of the total

production. The following statement shows these details for certain years since 1925-26; they differ from those shown in other tables in that they refer to periods of twelve months ending June, and not to calendar years:—

TABLE 636.—Purposes for which N.S.W. Coal was Used, 1925-26 to 1946-47.

Coal Used.	1925-26.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
<b>In Factories in N.S.W.—</b>	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Fuel in Electricity Works	782,409	1,162,997	1,527,303	1,559,777	1,674,888	1,695,575	1,978,993
„ Other Factories...	1,333,387	1,346,667	1,510,142	1,476,823	1,356,192	1,263,669	1,521,442
	2,115,796	2,509,664	3,037,445	3,036,600	3,031,080	2,959,244	3,500,435
<b>Raw Material in Gas Works</b>	605,488	578,127	719,023	754,434	771,706	795,961	862,128
„ <b>Coke Works</b>	890,444	1,661,851	2,306,749	2,141,836	1,748,363	1,456,382	1,791,592
	1,495,932	2,239,978	3,025,772	2,896,270	2,520,069	2,252,343	2,653,720
<b>Total in Factories (N.S.W.)</b>	3,611,728	4,749,642	6,063,217	5,932,870	5,551,149	5,211,587	6,154,155
<b>On Railways for Locomotive Purposes in N.S.W. ...</b>	1,342,280	994,371	1,447,122	1,462,085	1,329,000	1,321,606	1,329,834
<b>Total, Factories and Railways (N.S.W.) ...</b>	4,954,008	5,744,013	7,510,339	7,394,955	6,880,149	6,533,193	7,483,989
<b>Exports—</b>							
Interstate*—Cargo ...	2,132,173	1,860,639	2,793,197	2,721,569	2,866,264	2,498,697	2,378,030
„ Bunker ...	†405,223	411,098	357,658	378,310	339,313	286,700	289,688
<b>Total, Interstate ...</b>	2,537,396	2,271,737	3,150,855	3,099,879	3,205,577	2,785,397	2,667,718
Overseas—Cargo ...	792,144	381,778	254,043	157,741	189,196	75,383	44,265
„ Bunker ...	882,446	516,655	255,864	162,422	159,204	173,180	289,423
<b>Total, Overseas ...</b>	1,674,590	898,433	509,907	320,163	348,400	248,563	333,688
<b>Total Exports ...</b>	†4,211,986	3,170,170	3,660,762	3,420,042	3,553,977	3,033,960	3,001,406
<b>Total, Factories, Railways and Exports ...</b>	†9,165,994	8,914,183	11,171,101	10,814,997	10,434,126	9,567,153	10,485,395

\* Approximate.

† Excluding bunker coal shipped on interstate vessels in Sydney Harbour.

The quantity of coal used as fuel in factories has grown with expansion in the secondary industries, the requirements of the electric light and power works and the coke works being an important factor. The quantity used in coke works increased rapidly in the early stages of the war as a result of expansion in the iron and steel industry. Although coal was in short supply in 1946-47 New South Wales factories absorbed over 70 per cent. more coal than in 1925-26. Comparing those years coal exported interstate as cargo and in ships' bunkers was about 5 per cent. greater, but about 80 per cent. less coal went into overseas ships with only one-sixth of it as cargo. Ordinarily the consumption of coal in railway locomotives fluctuates according to the volume of goods traffic, but latterly it has been governed in some degree by the availability of coal.

#### PRICES OF COAL.

Movements in the prices of coal from 1916 to 1929 and a broad indication of their trends in the following ten years were illustrated at page 588 of the Year Book, 1941-42 and 1942-43. The quotations were given on the basis of best large coal at the principal points of shipment from the three coalmining districts in New South Wales, viz. Northern and Southern coal f.o.b., Newcastle and Port Kembla, respectively, and Western coal f.o.r. Lithgow, and therefore included certain handling and transport charges.

The trend in coal prices is indicated approximately by the average values per ton of coal at the *pit head* as derived from statistics collected under the Census Act as shown in Table 630. Comparisons on this basis, as given below for the period 1927 to 1942, are subject to the qualification that the values stated are the general averages for all classes of coal (large, small and unscreened) and therefore may be affected in some degree by variations from year to year in the proportions of coal of differing qualities comprised in the total produced. Changes in the level of prices after 1942 cannot be revealed by these average values because in years since then the value of output as returned by colliery proprietors includes subsidy received from the Commonwealth Government as well as the proceeds from the sale of coal.

TABLE 637.—Average Value of Coal at Pit-top, 1927 to 1942.

Year.	Average Value of Coal of All Grades at Pit Top—per ton.				Year.	Average Value of Coal of All Grades at Pit Top—per ton.			
	Northern District.	Southern District.	Western District.	All Districts.		Northern District.	Southern District.	Western District.	All Districts.
1927	s. d.	s. d.	s. d.	s. d.	1935	s. d.	s. d.	s. d.	s. d.
1928	19 2	12 6	16 8	17 7	1936	10 10	12 10	8 5	10 9
1929	19 0	13 1	16 6	17 6	1937	11 3	13 0	8 9	11 2
1930	17 5	14 2	18 9	16 10	1938	12 0	14 0	9 6	12 0
1931	16 2	13 8	17 5	15 9	1939	12 7	14 5	10 8	12 8
1932	14 5	12 6	15 6	14 2	1940	13 6	15 0	11 6	13 6
1933	12 8	13 8	11 2	12 6	1941	14 6	16 7	12 0	14 7
1934	12 0	13 6	9 4	11 10	1942	15 11	18 8	13 6	16 1
1934	11 4	12 10	8 7	11 2					

After the outbreak of war in September, 1939, coal prices, though controlled, tended to rise as costs of production increased, and by the time of their stabilisation under the Commonwealth price stabilisation plan, about July, 1943, the average pit-head value of New South Wales coal of all grades had risen about 30 per cent. From the middle of 1943 until November, 1947, increases in colliery costs were met by the payment of subsidies by the Commonwealth Government and coal prices were virtually unchanged during that interval. Then substantial withdrawal of subsidies resulted in price increases which averaged from 4s. to 5s. per ton, and in November, 1947, the estimated average price at pit head was about 60 per cent. higher than in September, 1939, the increases ranging from about 45 per cent. in the Western and 60 per cent. in the Northern to about 80 per cent. in the Southern districts.

Subsidy payments to colliery owners in Australia (mainly in New South Wales) amounted to £101,268 in 1943-44, £154,214 in 1944-45, £430,694 in 1945-46, and to £958,949 in 1946-47, exclusive of certain sums payable by colliery owners (in respect of refundable receipts from interstate freight charges) which were not collected from them.

#### OIL SHALE.

Oil-bearing mineral, which is a variety of torbanite or cannel coal, known locally as kerosene shale, has been found in many localities in New South Wales, the most important deposits being in the Capertee and Wolgan Valleys.

The production of oil shale from the opening of the mines in 1865 to the end of 1946 amounted to 2,717,119 tons valued at £3,621,649. During the years 1925 to 1938 operations were intermittent and the output was only 7,683 tons, valued at £4,738. Production increased in later years, averaged 123,678 tons a year from 1941 to 1945, and in 1946 was 121,654 tons valued at £139,902. Particulars are shown below:—

TABLE 638.—Oil Shale Mined in New South Wales.

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	tons.	£		tons.	£
1865 to 1938 ... ..	1,925,589	2,695,458	1944 ... ..	137,458	165,285
1939 ... ..	7,083	13,322	1945 ... ..	123,153	164,648
1940 ... ..	43,805	43,805	1946 ... ..	121,654	139,902
1941 ... ..	123,578	96,071			
1942 ... ..	117,324	142,343	Total ... ..	2,717,119	3,621,649
1943 ... ..	116,875	160,215			

In 1937 the Commonwealth Government made arrangements to assist a private company, the National Oil Proprietary Ltd., in the development of the Newnes-Capertee shale oil field. Part of the capital required for the project was provided by the Commonwealth Government and the Government of New South Wales, in the form of loans bearing a low rate of interest. At 31st December, 1946 the amount of capital available to the company was £3,782,735 comprising share capital (fully paid) £325,000, advance by State of New South Wales, £166,000, advances by Commonwealth, £3,291,735 including £385,918 advanced during 1946. Among other concessions, tariff protection is provided for a period of fifteen years to the extent of 7.4d. per gallon over imported petroleum spirit and 5.5d. over petrol refined in Australia from imported crude oil.

The production of crude oil was commenced at Glen Davis, near Newnes, in January, 1940, and although new processing plant enabled 3,696,981 gallons of petrol to be produced in 1946 compared with 1,979,511 gallons in 1945, the undertaking operated much below its capacity. Losses resulted in all years of trading, that of £401,830 in 1946 bringing total losses to £1,607,777.

The Fish River water supply scheme was adopted to serve this undertaking and to supply water to Lithgow Municipality, Blaxland and Oberon Shires and minor consumers. Water is supplied to National Oil Proprietary Limited and to the councils at the rate of 2d., and to minor consumers at 2s., per 1,000 gallons. Water supplies commenced in March, 1946. In May, 1947, the total cost of the scheme was estimated as £1,252,000, to be shared thus: Commonwealth, £704,500; State, £380,000; Lithgow Municipality, £102,000; Blaxland Shire, £60,350; and Oberon Shire, £5,150. Expenditure to 31st December, 1946 was £973,801, including £314,092 provided by the State wholly from revenue.

#### MINERALS WON, AS RECORDED BY THE DEPARTMENT OF MINES.

The particulars relating to the minerals won, as shown in the following pages, have been obtained from the records of the Department of Mines. They differ from those in the preceding tables, as they include, in many

cases, the value of the ores after treatment at the mines, and they relate rather to minerals recovered by treatment during the year than to minerals raised to the surface during the year. From the aggregate value shown in the annual reports of the Department, the output of iron made from scrap, Portland cement, lime, and coke has been deducted, because these items are included in the statistics of factories. The amount deducted in respect of these items was £3,044,205 in 1946. On the other hand a sum of £208,531 was added in order to raise the Department's valuation of gold output (assessed at "standard" rate) to value at current Australian price.

The average annual value of the minerals won in New South Wales (including quarry products) in each quinquennial period from 1901 to 1945, the annual production since 1937, and the total value of production to the end of each period are shown below:—

TABLE 639.—Value of all Minerals Won in N.S.W. to end of 1946.

Period.	Value of Minerals Won.*		Year.	Value of Minerals Won.*	
	Average per annum.	Total to end of period.		During year.	To end of year.
	£	£		£	£
To end of 1900	...	132,535,358	1937	13,496,603	519,606,113
1901-05	5,873,176	161,901,240	1938	12,044,998	531,651,111
1906-10	8,330,883	203,555,656	1939	13,649,956	545,301,067
1911-15	10,169,752	254,404,418	1940	13,673,524	558,974,591
1916-20	10,871,895	308,763,893	1941	16,718,429	575,693,020
1921-25	14,649,335	382,010,570	1942	18,147,818	593,840,838
1926-30	14,125,356	452,637,348	1943	18,406,385	612,247,223
1931-35	8,390,391	494,589,335	1944	17,934,578	630,181,801
1936-40	12,877,057	558,974,591	1945	17,467,422	647,649,223
1941-45	17,734,926	647,649,223	1946	20,808,754	668,457,977

\* Includes Quarry products.

Up to the end of the year 1900 the total value of gold won (£48,422,000) exceeded that of any other mineral, but with the subsequent decline in gold mining and the development of the coal and silver-lead fields, coal advanced rapidly to the head of the list, and the value of silver and lead surpassed the output of gold. At the end of 1946 coal represented 44 per cent. of the total value of mineral production, silver, silver-lead and zinc 30 per cent. and gold 11 per cent.

The values of the ores are estimated after assay. As many metals are commonly associated in the same mineral matter it is difficult to make a reliable estimate of the quantity and value, especially in cases where the ores are exported before final treatment.

#### *Individual Metals, Etc. Won in New South Wales.*

The following statement shows the estimated quantity and value of individual metals, precious stones and industrial minerals (other than coal and shale), won in the years 1939 and 1943 to 1946, also the total yield to the end of 1946.



TABLE 640.—Individual Metals, etc. Won in New South Wales.

Mineral.	Output during Year.					Total output to end of 1946.
	1939.	1943.	1944.	1945.	1946.	
Quantity.						
Gold ... .. oz. fine	87,189	63,779	62,610	43,129	32,009	15,936,621
Silver ... .. "	76,436	281,285	172,168	131,309	122,364	47,049,611
Silver-lead Ore, etc. ... .. tons	306,225	249,484	240,563	205,805	215,928	15,808,591
Lead—Pig, etc. ... .. "	...	...	...	...	...	326,621
Zinc—Spelter and Concentrates ... .. "	278,540	283,064	300,850	265,284	273,781	11,296,765
Copper (Ingots, Matte, Ore) ... .. "	1,925	3,798	3,099	3,056	2,046	299,593
Tin Ingots, Ore, etc. ... .. "	1,291	1,074	824	776	674	151,239
Iron—Pig (from Local Ores) ... .. "	...	204,442	151,888	42,673	...	2,210,672
Iron Oxide ... .. "	50	7,363	7,060	8,062	12,685	141,496
Ironstone flux ... .. "	...	...	...	...	...	135,162
Chrome Iron Ore ... .. "	116	405	242	282	...	46,242
Wolfram ... .. "	83	42	30	31	12	2,966
Scheelite ... .. "	14	23	18	17	22	1,895
Platinum ... .. oz.	7	3	2	2	...	26,244
Molybdenite ... .. tons	25	8	5	1	...	990
Antimony (Metal and Ore) ... .. "	77	418	348	152	55	21,928
Manganese Ore ... .. "	146	604	770	984	1,385	44,974
Bismuth ... .. cwt.	1	24	90	64	20	18,019
Alumite ... .. tons	750	428	630	631	716	66,510
Dolomite ... .. "	30,899	25,225	19,532	5,695	3,784	*
Limestone (mainly Flux) ... .. "	254,600	278,256	239,276	139,348	78,759	5,199,757
Magnesite ... .. "	24,809	64,039	31,245	22,342	21,375	461,742
Asbestos ... .. "	...	415	2,577	2,632	3,037	*
Diamonds ... .. carats	163	429	198	72	50	206,838
Value.						
Gold ... .. £	848,985	666,491	657,152	461,293	344,497	72,714,358
Silver ... .. £	7,021	29,741	22,597	26,703	28,297	6,287,674
Silver-lead Ore, etc. ... .. £	3,539,419	3,722,931	4,046,338	4,604,962	6,971,256	164,107,967
Lead—Pig, etc. ... .. £	...	...	...	...	...	6,442,397
Zinc—Spelter and Concentrates ... .. £	252,102	781,737	1,052,220	1,173,340	1,379,183	32,239,244
Copper (Ingots, Matte, Ore) ... .. £	105,447	379,800	304,900	305,016	344,682	17,961,155
Tin Ingots, Ore, etc. ... .. £	366,138	403,320	309,860	291,788	257,153	19,683,411
Iron—Pig (from Local Ores) ... .. £	...	1,124,431	835,384	208,208	...	10,753,309
Iron Oxide ... .. £	73	5,822	5,578	5,549	10,737	126,892
Ironstone Flux ... .. £	...	...	...	...	...	109,812
Chrome Iron Ore ... .. £	352	1,132	727	775	...	142,849
Wolfram ... .. £	16,240	14,033	10,982	9,604	3,859	413,036
Scheelite ... .. £	3,388	9,185	7,247	7,111	8,680	252,643
Platinum ... .. £	85	37	20	22	...	128,906
Molybdenite ... .. £	5,382	3,363	1,037	209	...	226,942
Antimony (Metal and Ore) ... .. £	1,261	17,161	10,433	5,808	2,179	437,648
Manganese Ore ... .. £	477	3,592	5,065	6,977	9,822	122,487
Bismuth ... .. £	10	958	1,370	2,362	515	250,351
Alumite ... .. £	1,423	802	2,189	2,222	1,195	227,026
Dolomite ... .. £	31,577	36,805	17,997	9,517	5,804	364,048
Limestone (mainly Flux) ... .. £	49,740	75,960	77,814	57,314	25,840	1,860,527
Magnesite ... .. £	34,217	117,140	46,097	26,721	26,230	790,763
Asbestos ... .. £	...	18,189	9,073	8,478	9,992	100,097
Diamonds ... .. £	167	900	479	167	115	150,432
Opal ... .. £	1,020	2,288	3,020	3,000	3,500	1,642,476

\* Not available.

## GOLD.

Though gold had been found in New South Wales in earlier years, the history of gold-mining in the State dates from 1851, when its existence in payable quantities was proved by E. H. Hargraves. The deposits are of various types, *e.g.*, alluvial gold, auriferous reefs or lodes, impregnations in stratified deposits and igneous rocks, and irregular deposits, as in auriferous ironstone. Gold is recovered also by dredging from the beds of rivers which drain auriferous country.

The yield of gold in 1929, viz. 7,496 oz. fine, was the lowest recorded in any year since 1851. During the ensuing period of economic stress, production expanded as a result of increased activities of fossickers and a rapid rise in the price of gold, which was doubled between 1930 and 1934.

In 1940 the yield, 100,255 oz. fine, was the highest since 1916. Subsequently operations were curtailed owing to war-time conditions and the yield declined to 32,009 oz. fine in 1946. The prices paid for gold lodged at the Commonwealth Bank are shown in Table 649.

Following the war-time increase in the price of gold, a tax was imposed as from 15th September, 1939 on all gold produced in Australia and New Guinea. The tax was equal to half the amount by which the price of gold exceeded £A9 per fine oz., and was deducted by the Commonwealth Bank from payments made for gold received; certain rebates were allowed. Particulars of the tax were published on page 391 of the 1941-42 and 1942-43 edition of the Year Book. The tax was suspended as from 20th September, 1947 by the Gold Tax Suspension Act, 1947.

By proclamation under the Banking Act, 1945, all persons possessing gold are required to deliver it to the Commonwealth Bank or an agent of the Bank, and may not sell gold to any other buyer. This regulation does not apply to gold coins up to £25 in value, nor to wrought gold. The price of gold fixed by the Bank is based on the price realisable abroad.

The following table shows the quantity and value of the gold won in New South Wales to the end of 1946:—

TABLE 641.—Gold Won in New South Wales, 1851 to 1946.

Period.	Quantity.	Value.*	Period.	Quantity.	Value.*
	oz. fine.	£		oz. fine.	£
1851-1900	11,399,508	48,422,001	1939	87,189	848,985
1901-1910	2,252,851	9,569,492	1941	88,091	941,244
1911-1920	1,145,185	4,864,440	1942	77,249	807,436
1921-1925	133,335	566,375	1943	63,779	666,491
1926-1930	70,287	298,557	1944	62,610	657,162
1931-1935	163,091	1,295,098	1945	43,129	461,293
1936-1940	405,488	3,820,282	1946	32,009	344,497
1941-1945	334,858	3,533,616			
			Total to 1946 ...	15,936,612	72,714,358

\* Value at Australian price.

#### SILVER, LEAD, AND ZINC.

The production of lead and zinc in New South Wales is associated closely with the mining of silver, the Broken Hill silver-lead deposits being the main source of the output.

An account of the Broken Hill silver-lead field was published at page 662 of the Official Year Book, 1937-38.

The lead concentrates are treated at Port Pirie in South Australia. Although the greater part of the zinc concentrates has been exported, large quantities are treated in Australia at Risdon, Tasmania, and portion at Cockle Creek (near Newcastle) in the production of sulphuric acid.

The quantity of ore raised at the Broken Hill mines in the years 1939 and 1943 to 1946 was as follows:—

	1939.	1943.	1944.	1945.	1946.
Ore raised—tons	1,423,881	1,172,704	1,166,351	1,064,969	1,127,192

A large silver-lead mine has been opened at Captain's Flat, where the ore reserves are believed to amount to 5,000,000 tons. In terms of an agreement with the mining company, the Government of New South Wales

constructed a railway from Bungendore on the Goulburn-Bombala railway to Captain's Flat. Production of ore at the mine was commenced at the beginning of 1939; the annual output of ore is shown below:—

	1939.	1943.	1944.	1945.	1946.
Ore raised—tons	134,794	241,612	215,076	119,106	167,020

Upon the outbreak of war in September, 1939, contracts for the supply of lead and zinc were arranged between the United Kingdom Ministry of Supply and the major Australian producers of those metals. The original contracts were for a period of twelve months, but were renewable by notice, and called for the supply of up to 160,000 tons of lead and 36,000 tons of zinc a year. The initial contract prices of £stg.15 1s. 3d. or £A18 16s. 7d. per ton for lead, and £stg.18 or £A22 10s. per ton for zinc at Port Pirie and Risdon, respectively, were subject to adjustment to take account of increases in the production and delivery costs of the sellers. These contracts were renewed from year to year until terminated by notice from the Ministry of Supply on 9th August, 1945.

In assessing the quantity and value of the metals won from the silver-lead ores mined in New South Wales, the Department of Mines estimates the total value on the basis of the metal produced within the State and the value of the ore, concentrates, etc. not smelted within the State, as declared by the several companies at the date of export from the State. The following table is a summary up to the end of 1946 of the Department's records of the quantity and value of the silver and lead produced in New South Wales from local ores, and the quantity and value of silver-lead and zinc concentrates produced in the State and despatched elsewhere for treatment:—

TABLE 642.—Silver, Lead and Zinc Won in New South Wales to end of 1946.

Period.		Silver.	Silver-lead Concentrates, Carbonate ore, etc.	Lead; Pig, in Matte, etc.	Zinc Concentrates.
		Quantity.			
		oz.	tons.	tons.	tons.
To 1900	...	9,572,829	3,020,611	14,680	138,901
1901–1905	...	4,154,020	1,985,868	17,550	183,782
1906–1910	...	8,310,962	1,751,751	71,435	1,460,138*
1911–1915	...	12,460,553	1,694,834	114,375	2,093,783
1916–1920	...	7,982,192	866,654	80,115	553,628
1921–1925	...	2,960,993	1,013,376	28,466	1,449,599
1926–1930	...	33,017	1,377,163	...	1,388,821
1931–1935	...	273,100	1,092,253	...	1,115,356
1936–1940	...	347,273	1,492,687	...	1,272,006
1941–1945	...	832,316	1,297,466	...	1,366,970
1939	...	76,436	306,225	...	278,540
1942	...	179,038	289,198	...	273,368
1943	...	281,285	249,484	...	283,904
1944	...	172,168	240,563	...	300,850
1945	...	131,309	205,805	...	265,284
1946	...	122,364	215,928	...	273,781
Total	...	47,049,619	15,808,591	326,621	11,296,765

\* Includes 2,758 tons of spelter.

TABLE 642.—Silver, Lead and Zinc Won in New South Wales—*continued*.

Period.			Silver.	Silver-lead Concentrates, Carbonate ore, etc.	Lead; Pig, in Matte, etc.	Zinc Concentrates.
			Value.			
			£	£	£	£
To 1900	...	...	1,562,501	28,924,613	274,585	157,066
1901-1905	...	...	445,051	8,910,586	255,366	440,402
1906-1910	...	...	892,414	11,561,794	996,646	3,761,223
1911-1915	...	...	1,302,510	14,302,570	1,899,601	6,861,489
1916-1920	...	...	1,426,886	12,920,076	2,358,625	2,195,599
1921-1925	...	...	471,312	15,360,784	657,574	5,171,152
1926-1930	...	...	3,259	15,498,294	...	5,263,786
1931-1935	...	...	24,788	9,793,901	...	1,391,969
1936-1940	...	...	31,508	18,890,575	...	1,717,881
1941-1945	...	...	99,148	20,973,518	...	3,899,494
1939	...	...	7,021	3,539,419	...	252,102
1942	...	...	18,881	4,149,540	...	583,489
1943	...	...	29,741	3,722,931	...	781,737
1944	...	...	22,597	4,046,338	...	1,052,220
1945	...	...	20,703	4,604,962	...	1,073,340
1946	...	...	28,297	6,971,256	...	1,379,183
Total	...	...	6,287,674	164,107,967	6,442,397	32,239,244

As the bulk of the ore produced in the silver-lead mines is exported for treatment to other parts of Australia or despatched in the form of concentrates to overseas countries, the figures shown in the preceding table do not indicate fully the value of the New South Wales production of the various metals. The Department of Mines has collected records from the various mining and smelting companies and ore-buyers with the object of ascertaining the actual value accruing to the Commonwealth from the silver-lead mines of this State. Thus the following particulars have been obtained regarding the quantity and value of the silver, lead, and zinc extracted within the Commonwealth, and the gross metallic contents of concentrates exported overseas have been estimated on the basis of average assays. In the case of the lead and zinc contents, the quantities have been estimated only when payment was made for them.

TABLE 643.—Silver, Lead and Zinc—Metal Obtained and Concentrates Exported, 1921 to 1946.

Year	Metal obtained within Commonwealth from ores raised in New South Wales.				Concentrates exported overseas.					Total Value of Production from Silver-lead Ores of New South Wales.
	Silver.	Lead.	Zinc.	Aggregate Value.	Quantity	Contents by average assay.			Assessed Value.	
						Silver.	Lead.	Zinc.		
	oz. fine.	tons.	tons.	£	tons.	oz. fine.	tons.	tons.	£	
1921	3,624,413	47,426	1,425	1,723,864	47,127	617,477	6,530	19,272	261,238	1,985,102
1929	7,619,884	165,364	46,163	5,018,014	156,532	835,697	7,009	76,619	734,261	6,652,275
1931	6,177,863	129,810	53,832	2,995,029	95,421	460,958	13,405	43,625	257,705	3,252,734
1936	7,775,514	157,755	57,744	4,608,888	147,969	779,239	18,569	68,011	540,319	5,158,207
1939	8,910,129	198,776	44,965	4,811,208	201,426	647,620	17,636	109,346	650,809	5,462,017
1941	9,192,833	212,665	55,094	7,553,248	130,403	164,001	7,775	62,971	451,525	8,004,773
1942	8,640,871	205,630	55,473	7,327,881	165,319	464,450	17,144	68,387	753,664	8,081,545
1943	7,643,746	179,919	51,266	5,934,980	221,116	286,023	8,024	113,494	1,136,012	7,070,942
1944	6,592,326	154,281	57,311	5,577,578	182,565	474,302	18,589	67,293	939,933	6,517,511
1945	6,438,608	153,973	65,263	5,908,609	230,005	247,713	7,904	105,406	1,148,022	7,056,681
1946	5,785,991	136,961	59,309	5,715,259	140,852	171,731	6,858	70,101	4,236,523	9,951,782

The silver-lead ores mined in New South Wales contain, in addition to silver, lead, and zinc, a number of other metals, *e.g.*, cadmium, copper, gold, and antimony, but unless these metals are extracted within New South Wales they are not represented in statistics of the mineral production of the State, except by inclusion as zinc concentrates.

Cadmium is recovered at Risdon, Tasmania, as a by-product in the treatment of zinc ores mined at Broken Hill. The quantity extracted to the end of 1946 was 3,767 tons, valued at £1,172,202, of which 785 tons, valued at £332,665, were extracted in the five years ended 1945. Extraction in 1946 was 186 tons, valued at £83,707.

## COPPER.

The ores of copper are distributed widely throughout New South Wales. Deposits at Cobar yielded a large output until 1920 when the better grade ores were worked out. The industry has been handicapped severely in many places by the high cost of transport to market, and, as the price fluctuates considerably, operations have been intermittent. Large quantities of low-grade ores are available, but in recent years the output of copper has been obtained mainly from the treatment of silver-lead concentrates mined at Broken Hill and from Cobar.

The quantity and value of the copper won in New South Wales, as estimated by the Department of Mines, are shown below:—

TABLE 644.—Copper Won in New South Wales, 1858 to 1946.

Period.	Ingots, Matte, and Regulus.		Ore and Concentrates.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	tons.	£	tons.	£	£
1858-1900	95,501	5,474,309	6,101	92,651	5,566,960
1901-1905	33,989	2,011,609	8,578	104,533	2,116,142
1906-1910	41,898	2,869,101	6,872	62,006	2,931,107
1911-1915	36,305	2,169,508	9,870	108,226	2,277,734
1916-1920	21,453	2,355,248	554	8,887	2,364,135
1921-1925	3,863	259,926	129	1,822	261,748
1926-1930	867	58,053	339	3,102	61,155
1931-1935	3,304	123,951	208	4,026	127,977
1936-1940	6,202	362,838	5,627	157,111	519,949
1941-1945	*	770,078	*	619,488	1,389,566
1939	1,382	77,031	543	28,376	105,407
1941	}	80,352	}	37,138	117,490
1943		192,300		187,500	379,800
1944		111,200		198,700	309,900
1945		160,000		145,000	305,000
1946		157,950		186,732	344,682
Total .....	.....	16,612,571	.....	1,348,584	17,961,155

\* Not available on comparable basis.

The United Kingdom Ministry of Supply undertook, upon the outbreak of war, to buy any Australian surplus production of copper up to 7,000 tons a year, but as output did not satisfy local requirements a contract was not entered into. Since 1941 production has been encouraged by a bonus payment of £5 per ton on copper won from new workings or in

excess of previous quantities from existing mines. Funds for these bonus payments were obtained by a levy of £1 10s. per ton on copper sold to consumers in Australia.

### TIN.

Tin, unlike copper, is restricted in its geographical and petrological range, and is the rarest of the common metals of commerce. The lodes discovered in New South Wales are numerous, but they are on a small scale. The maximum depth attained is about 360 feet.

Tin ore occurs in the northern, southern, and western parts of the State. The areas in which workable quantities have been located are on the western fall of the New England Tableland, with Emmaville and Tingha as the chief centres, and at Ardlethan in the southern district. Alluvial deposits of stream tin in the northern rivers are exploited by means of dredging.

Particulars of the output and the value of production of tin are shown below:—

TABLE 645.—Tin Won in New South Wales, 1872 to 1946.

Period.	Ingots.		Ore, Concentrates, etc.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	tons.	£	tons.	£	£
1872-1900	67,055	5,879,803	18,581	908,130	6,787,933
1901-1905	4,319	557,855	1,994	142,977	700,832
1906-1910	5,244	816,061	3,947	377,620	1,193,681
1911-1915	4,268	793,550	7,262	806,815	1,600,365
1916-1920	4,346	1,053,645	6,953	1,005,841	2,059,486
1921-1925	3,629	805,294	2,005	204,073	1,009,367
1926-1930	4,654	1,120,122	54	1,733	1,121,855
1931-1935	4,941	1,050,080	56	7,419	1,057,499
1936-1940	5,908	1,622,534	97	16,370	1,638,904
1941-1945	5,252	1,865,301	...	...	1,865,301
1939	1,286	365,403	5	735	366,138
1942	1,175	417,210	...	...	417,210
1943	1,074	403,320	...	...	403,320
1944	824	309,860	...	...	309,860
1945	776	291,788	...	...	291,788
1946	674	257,153	...	...	257,153
Total .....	110,290	15,821,398	40,949	3,470,978	19,292,376

There is a number of dredges for the recovery of tin in the northern districts. The quantity of stream tin obtained to the end of 1946 was 36,731 tons, valued at £5,300,607. Particulars of output of the dredges in the five years 1942 to 1946 are as follow and may be compared with 972 tons valued at £176,682 dredged in 1939:—

	1942.	1943.	1944.	1945.	1946.
Quantity—tons	50	461	509	498	444
Value—£	.. 115,187	119,943	138,078	132,740	118,150

## IRON AND IRON ORES.

Iron ore of good quality occurs in many parts of New South Wales. The most extensive deposits are at Cadia, where 10,000,000 tons may be recovered economically; at Carcoar, where a large quantity has been produced; and at Goulburn and Queanbeyan, each containing about 1,000,000 tons. At Wingello there are about 3,000,000 tons of aluminous iron ores of low grade. It has been estimated that in the known deposits, excluding Wingello ores, there are 15,000,000 tons which may be recovered by quarrying, and that a much greater quantity may be obtained by more costly methods of mining.

The quantity of pig iron produced from local ores during the years 1907 to 1946 was 2,210,672 tons, valued at £10,753,309. There was no production between 1930 and 1940, except in 1935 when the output was 4,580 tons, valued at £18,320. In recent years supplies were obtained from several deposits in New South Wales to help maintain war-time production of the iron and steel works. From these ores 63,102 tons of pig iron, valued at £254,000 were produced in 1941; 182,118 tons, valued at £819,531 in 1942; 204,442 tons, valued at £1,124,431 in 1943; 151,888 tons, valued at £835,384 in 1944; and 42,673 tons, valued at £208,208 in 1945; the working of local ores ceased in the middle of the lastnamed year.

Production of ironstone flux in New South Wales was recorded in only two years since 1922, viz. 2,432 tons, valued at £950 in 1933; and 75 tons, valued at £71 in 1941.

Further details relating to the operations of ironworks are shown on page 654 of this volume.

## IRON OXIDE.

Iron oxide is obtainable in the Port Macquarie, Moss Vale, Newcastle, Milton, Nowra, and Goulburn districts for use in purifying gas or as a pigment. The output as shown in Table 640 has increased in recent years. The total output to the end of 1946 was 141,496 tons valued at £126,892.

## OTHER METALS.

The list of metals won in New South Wales includes, in addition to those described above, a number of useful metals of which output in the years 1939 and 1943 to 1946 is shown in Table 640.

*Platinum.*—Platinum occurs in several districts of New South Wales, but platinum mining is comparatively unimportant. The quantity produced to the end of 1946 amounted to 20,244 oz., valued at £128,996.

*Chromite.*—Chromite, or chromic iron ore, is the only commercially important ore of chromium. It is found usually in association with serpentine. The chromite mined in New South Wales is used as a refractory material. The principal deposits are in the Gundagai and Tumut districts, and there are smaller quantities in the northern portion of the State. The quantity produced during 1945 was 282 tons, valued at £775; making a total output of 46,242 tons, valued at £142,849. No chromite was produced in 1946.

*Scheelite and Wolfram.*—The tungsten ores, scheelite and wolfram, occur in many localities in New South Wales, generally in association with tinstone (cassiterite), bismuth, and molybdenite. These ores are used mainly in the manufacture of special steels. The production in 1946 was

22 tons of scheelite, valued at £8,680, and 12 tons of wolfram, valued at £3,859. The total production up to the end of 1946 was 1,895 tons of scheelite, valued at £252,643, and 2,966 tons of wolfram, valued at £413,036.

*Molybdenum.*—Supplies of molybdenite, the principal ore of molybdenum, exist in New South Wales. Its main use is for the manufacture of molybdenum steel. The output to the end of 1946 was 990 tons, valued at £226,942, of which 1.4 tons, valued at £209 were produced in 1945 and none in 1946.

*Antimony.*—This mineral may be obtained in a number of districts, in the north-east of the State. Owing to fluctuations in the price of the metal, mining is spasmodic. The total output of antimony to the end of the year 1946 was 21,928 tons, valued at £437,648, of which 55 tons, valued at £2,179 were produced in 1946.

*Manganese.*—Manganese ores have been discovered in various places but generally in localities which lack facilities for transport. The total production to the end of 1946 was 44,974 tons, valued at £122,487, including 1,385 tons, valued at £9,822 produced in 1946.

*Bismuth.*—Bismuth has been obtained chiefly in the neighbourhood of Glen Innes, and at Whipstick in the South Coast division. In other districts bismuth is associated with molybdenite and wolfram ores. The quantity of bismuth produced in 1946 was 1 ton, valued at £515. The quantity produced to the end of 1946 was 901 tons of ore, valued at £250,351.

*Mercury.*—Cinnabar, the most important ore of mercury, occurs in numerous localities, but it has not been discovered in a sufficiently concentrated form to enable it to be mined profitably.

*Zircon and Rutile-Ilmenite.*—All the zircon and rutile-ilmenite produced in New South Wales is derived from naturally concentrated sands on the coastal beaches north from Coff's Harbour. Zircon is used in the manufacture of ceramics and chemical equipment and as a refractor and insulating agent. Rutile-ilmenite is used in the manufacture of welding rods and steel, ceramics, paints, etc. The economic treatment of beach sands containing these minerals commenced in 1934, but only small quantities were separated before the war. During the war production increased substantially and in 1946 the value of zircon-rutile-ilmenite produced was £142,037, compared with £198,083 in 1945, and an average of £134,159 in each year 1941 to 1944. Very little of these minerals is used in Australia, and most of the production is marketed overseas.

## DIAMONDS.

Diamonds and other gem-stones occur in various places in New South Wales, but an extensive field has not been discovered.

Records show that up to the end of 1905 the output of diamonds was 154,309 carats valued at £101,969. Progressively fewer diamonds were obtained in later years; recorded production was 47,819 carats valued at £42,483 from 1906 to 1925 and 4,660 carats valued at £5,865 from 1926 to 1945. With 50 carats valued at £115 in 1946 the total recorded to the end of that year was 206,838 carats, valued at £150,432. It is probable, however, that the unrecorded output was considerable.



## OPAL.

Precious opal occurs in two geological formations in New South Wales, viz. in tertiary vesicular basalt and in the upper cretaceous sediments. The most important deposits are in the upper cretaceous rocks at White Cliffs and Lightning Ridge. Gems from the latter field are remarkable for colour, fire and brilliancy. The opals from vesicles in the tertiary basalt at Tintenbar in the North Coast division resemble the Mexican gems.

The following table shows the estimated value of precious opal won in New South Wales.

TABLE 646.—Opal Won in N.S.W., 1890 to 1946.

Period.	Value.	Period.	Value.
	£		£
1890-1900	456,599	1936-1940	15,715
1901-1905	476,000	1941-1945	9,933
1906-1910	305,300	1944	3,020
1911-1915	154,738	1945	3,000
1916-1920	105,547	1946	3,500
1921-1925	51,740		
1926-1930	47,409	Total	1,642,476
1931-1935	15,995		

The output of opal was greatest during the five years ended 1903, when the average value was £115,000 per annum. The value of opal won in 1946 was £3,500.

## ALUNITE.

Alunite, or alumstone, occurs at Bullahdelah, about 35 miles from Port Stephens, in a narrow mountain range which for more than a mile is composed mainly of alunite, of varying purity. Owing to the nature of the occurrences, it has not been possible to estimate the ore reserves of commercial value. Four varieties of alunite are recognised at the mines, but operations were confined mainly to the light-pink ore, the average yield being about 80 per cent. of alum.

The output of alunite in 1946 was 716 tons, valued at £1,195, and the total production to the end of 1946 was 66,510 tons, valued at £227,026.

## OTHER MINERALS.

*Marble.*—Beds of marble of great variety of colouring and with highly ornamental markings are located in many districts of New South Wales. Much of the marble is eminently suitable for decorative work.

*Limestone.*—Immense supplies of limestone are distributed widely throughout the State. The commercial value of the deposits depends mainly on their accessibility and proximity to market. The bulk of the limestone is raised for the manufacture of cement in localities where coal and shale are readily available.

*Fireclays.*—Fireclays of good quality are found in the permo-carboniferous coal measures, and excellent clays for brick-making, pottery, etc. may be obtained in the State, chiefly in Sydney and Wollongong districts.

*Magnesite.*—Magnesite is distributed widely, but few deposits are of commercial value. Large quantities have been mined at Fifield, Attunga,

and Barraba. The output during 1946 was 21,375 tons, valued at £26,230 as compared with 24,809 tons, £34,217 in 1939, and the annual average of 35,613 tons of the value of £60,056 during the war years 1941 to 1945.

*Asbestos* deposits were not worked to any extent prior to 1941. In the five years ended 1945 production was 6,421 tons of ore valued at £41,240. The output in 1946 was 3,037 tons valued at £9,992.

*Diatomaceous earth* occurs in several localities. The principal deposits are situated at Cooma, Barraba, Coonabarabran, and Wyrallah. The output in 1946 was 3,735 tons, valued at £5,106.

*Other Mineral Deposits.*—Other mineral deposits known to exist but not worked extensively include barytes, fluorspar, Fuller's earth, ochre, graphite, gypsum, slate, and mica. Quartzite for the manufacture of silica bricks is obtainable in large quantities.

#### QUARRIES.

The Hawkesbury formation in the Metropolitan district provides excellent sandstone for architectural use. The supply is very extensive, and the stone is finely grained, durable, and easily worked. Desert sandstone in the north-western portion of the State and freestone in the northern coal districts also provide good building stone.

Syenite, commonly called trachyte, is found at Bowral. For building purposes it is solid, and takes a beautiful polish.

Granite occurs at many places in the State, and has been quarried generally in places near the coast, whence transport is cheaper than from less accessible localities. The pylons of the Sydney Harbour Bridge are faced with granite quarried at Moruya.

Basalt or blue metal, suitable for ballasting roads and railway lines and for making concrete, is obtained at Kiama and other localities.

The following statement shows the output of the quarries and clay, gravel and sand pits during the years 1944 to 1946, as recorded by the Department of Mines. These records do not include the output of limestone used for Portland cement or lime because these products are classified by the Department as products of mines (see page 690):—

TABLE 647.—Output of Quarries, 1944 to 1946.

Stone, etc.	1944.		1945.		1946.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value
	tons.	£	tons.	£	tons.	£
<b>Building Stone—</b>						
Basalt	...	...	250	88	1,000	600
Granite ... ..	683	2,803	1,635	5,272	1,350	6,183
Marble	...	...	50	400	925	1,839
Limestone	946	1,410	2,228	5,729	1,196	602
Sand and Sandstone	30,895	22,094	9,161	24,367	180,856	61,626
Syenite	35	65	132	553	520	958
<b>Macadam, Ballast, etc.—</b>						
Basalt	544,477	163,343	603,451	181,035	750,589	225,175
Gravel	1,897,226*	379,445	2,042,518*	408,504	2,564,605*	419,662
Miscellaneous	540,642	100,270	640,580	111,933	746,132	129,297
<b>Clays—</b>						
Brick, Tile, Pipe, Pottery	276,834	55,367	412,760	82,552	935,160	170,482
Fire Clay	46,851	17,570	37,836	14,188	37,969	11,747
Clay Shale	53,593	10,719	59,904	11,981	61,394	6,756
Kaolin and White Clays	19,222	14,417	18,026	13,519	21,021	21,393
<b>Total</b>	...	767,612	...	860,121	...	1,056,325

\* Cubic yards.

The production of building stone fluctuates with the demand for stone for the construction of reservoirs and other public works. The value of the annual output of the quarries, as recorded in returns supplied by owners to the Government Statistician in various years from 1929 to 1940 and as recorded by the Department of Mines in later years is shown below:—

TABLE 648.—Value of Quarry Output, 1929 to 1946.

Year.	Value of Output.	Year.	Value of Output.	Year.	Value of Output.
	£		£		£
1929	1,373,855	1938	1,654,887	1943*	1,152,814
1931	634,420	1939	1,446,927	1944*	767,511
1932	563,409	1940	1,273,227	1945*	860,121
1936	1,261,301	1941*	1,277,757	1946*	1,056,325
1937	1,662,135	1942*	929,854		

\* See note re limestone in paragraph above Table 647.

## PRICES OF METALS.

During the war years the export prices of Australian base metals were governed, as to lead and zinc, principally by the terms of contracts for sale to the United Kingdom (see page 693) and as to copper and tin, by prices in London as determined by the Ministry of Supply. Since August, 1945 export prices have accorded with values ruling in world markets.

The average export prices of gold, silver, lead, zinc, tin and copper (in Australian currency) in 1929, 1931 and each year since 1939 are shown in the following table. The prices for the year represent the mean of the average monthly prices, and for the months shown, the average of daily quotations. The prices shown for gold are the averages of prices paid for gold by the Commonwealth Bank in Australia. For other metals they are the prices f.o.b. at principal Australian ports of shipment.

TABLE 649.—Prices of Metals, in Australian Currency—1929 to 1947.

Period.	Gold.	Export Parities.				
		Silver (Standard).	Lead.	Zinc (Electrolytic).	Tin (Standard).	Copper (Electrolytic Wire bars).
	per fine oz.	per oz.	per ton.	per ton.	per ton.	per ton.
	£ s. d.	s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Average—						
1929 ...	4 5 0	2 0 6	21 14 5	25 19 5	200 11 5	84 10 11
1931 ...	5 14 9	1 6 7	14 19 7	17 3 10	147 13 10	53 0 8
1939 ...	9 14 4	2 1 4	17 12 1	19 15 3	238 3 6	59 15 1
1940 ...	10 13 1	2 3 0	18 14 6	22 9 11	232 19 7	.....
1941 ...	10 13 8	2 4 3	19 11 4	22 12 11	295 1 6	.....
1942 ...	10 9 1	2 4 7	21 9 9	22 2 11	285 9 1	.....
1943 ...	10 9 0	2 4 6	22 19 2	23 15 2	283 1 6	.....
1944 ...	10 10 1	2 4 6	26 3 0	24 9 4	335 7 2	.....
1945 ...	10 13 10	2 10 6	34 10 10	37 6 4	350 9 0	.....
1946 ...	10 15 3	4 8 0	56 8 6	55 0 2	414 19 0	.....
August, 1939	9 10 5	1 10 3	18 6 8	19 13 9	273 15 11	62 2 0
June, 1944	10 9 5	2 4 6	26 10 5	29 4 4	325 11 4	.....
June, 1945	10 14 9	2 4 8	39 1 6	31 11 3	350 14 5	.....
June, 1946	10 15 3	4 2 9	53 14 6	50 10 7	425 2 11	.....
June, 1947	10 15 3	3 11 8	94 3 0	64 16 4	523 12 10	.....

Prices of metals for use in Australia are controlled under the Commonwealth war-time prices regulations described in the chapter "Food and Prices". For lead, zinc, and copper, the fixed prices to Australian consumers have been varied to cover increases in costs of production, particularly as regards lead and zinc, and have not been permitted to rise as steeply as overseas prices. Although there is no official control over the distribution of the metals (except of tin, for which the Commonwealth operates a pool embracing imported and local metal), the lower home market prices are made effective by the requirement of a license to export these metals and because a few large companies produce nearly all the lead, zinc and copper won in Australia. Licenses to export copper or tin are rarely granted as production of these does not satisfy Australian needs.

The maximum basic prices per ton for Australian consumers for these metals at smelters' works in forms, grades, and quantities as specified by the Prices Commissioner from time to time are shown below; the prices orders prescribe appropriate price margins for the metals in various other forms, grades, and quantities:—

TABLE 650.—Prices of Metals in Australia, 1939 to 1947.

Lead. (Pig.)		Zinc. (Bars, Block, Ingots.)		Copper. (Bars, Blocks, Ingots, Pig.)		Tin. (Ingots.)	
Date Price Fixed.	Price per ton.	Date Price Fixed.	Price per ton.	Date Price Fixed.	Price per ton.	Date Price Fixed.	Price per ton.
	£ s. d.		£ s. d.		£ s. d.		£
1939, Dec. 19	20 17 6	1939, Dec. 19	20 2 6	1939, Dec. 19	36 19 6	1939, Oct. 6	299
1940, Feb. 8	22 0 0	1940, Feb. 8	22 0 0	1940, Feb. 16	76 0 0	1940, Feb. 16	306
.....	.....	.....	.....	1941, Feb. 7	78 10 0	1941, April 8	320
.....	.....	.....	.....	May 5	86 10 0	1942, May 1	371
.....	.....	.....	.....	1942, May 8	105 0 0	1943, April 8	376
.....	.....	.....	.....	1945, May 8	100 0 0	1946, Aug. 6	383
.....	.....	.....	.....	1946, June 7	95 0 0	1947, April 28	418
.....	.....	.....	.....	.....	.....	Oct. 20	515

#### ADMINISTRATION OF MINING LAWS.

The general supervision of the mining industry in the State and the administration of the enactments relating to mining are functions of the Department of Mines under the control of a responsible Minister of the Crown. In the mining districts Wardens' Courts, each under the sole jurisdiction of a Warden, determine suits relating to the right of occupation of land for mining and other matters in regard to mining operations.

#### *Occupation of Land for Mining.*

The occupation of land for the purpose of mining is subject to the Mining Act of 1906 and its amendments. Any person may obtain a miner's right which entitles the holder, under prescribed conditions, to occupy Crown land not otherwise exempted, for mining purposes and to mine therein, and to occupy a small residence area. A holder of a miner's right may apply also for an authority to prospect on or to occupy exempted Crown lands, and, in the event of the discovery of any mineral, he may be required to apply for a lease of the land to continue prospecting operations. Such

authority may be granted for any period not exceeding twelve months, but the term may be extended upon application to two years to enable completion of prospecting operations.

A business license entitles the holder to occupy a limited area within a gold or mineral field for the purpose of carrying on any business except mining, and confers the right to only one holding at a time. Holders of miner's rights may take possession of more than one tenement, but are required to hold an additional miner's right in respect of each tenement after the first of the same class. The term of a miner's right or business license is not less than six months and not more than twenty years. It may be renewed upon application, and is transferable by endorsement and registration. The fee for a miner's right is at the rate of 5s. per annum, and for a business license £1 per annum.

Crown lands may be granted as mining leases, which authorise mining on the land, or as leases for mining purposes which authorise the use of the land for conserving water, constructing drains, etc. and railways, erecting buildings and machinery and dwellings for miners, generating electricity, dumping residues, and for other works in connection with mining, but do not allow mining or the removal of minerals from the land. Except in the case of special leases, which may be granted in certain cases, the maximum area of a mining lease varies according to the mineral sought, viz. opal,  $\frac{1}{2}$  acre; gold, 25 acres; coal, shale, mineral oils, petroleum, or natural gas, 640 acres; other minerals, 80 acres.

Private lands are open to mining subject to the payment of rent and compensation and to other conditions as prescribed. The mining wardens may grant to the holders of miner's rights authority to enter private lands, but, except with the consent of the owner, the authority does not extend to land on which certain improvements have been effected, *e.g.*, cultivation, or the erection of substantial buildings. An authority may be granted for a period up to two years, and during its currency the holder may apply for a mining lease of the land. Leases of private lands for mining purposes may be granted also. The maximum areas of private lands that may be leased are:—Gold, 25 acres; opal, 150 ft. square; coal and shale, 640 acres; and other minerals, 80 acres. The owners of private lands, with the concurrence of the Minister for Mines, may lease areas under agreement to holders of miner's rights.

Dredging leases may be granted in respect of Crown and private lands, including the beds of rivers, lakes, etc. and land under tidal waters.

#### *Area of Land Occupied for Mining.*

The area under mining occupation in New South Wales at 31st December, 1940 was approximately 439,807 acres. The area is not stated definitely, as the area held under miner's rights is estimated by the mining registrars in cases where the holders are not required to register the areas they occupy.

TABLE 651.—Mining Leases, etc., 1939 and 1940.

Nature of Holding.	At 31st December, 1939.			At 31st December, 1940.		
	Crown Lands.	Private Lands.	Total.	Crown Lands.	Private Lands.	Total.
	acres.	acres.	acres.	acres.	acres.	acres.
Leases—						
Mining ... ..	172,636	95,948	268,579	170,745	95,268	266,013
Mining Purposes ... ..	7,270	1,897	9,167	7,304	2,067	9,371
Agreements ... ..	...	45,989	45,989	...	56,197	56,197
Authority to Enter ... ..	...	56,694	56,694	...	50,357	50,357
Authority to Prospect ... ..	14,672	...	14,672	10,228	...	10,228
Miner's Rights and Business Licenses ... ..	7,461	...	7,461	6,847	...	6,847
Applications for Leases—						
Mining ... ..	68,528	4,820	73,348	17,234	5,231	22,465
Mining Purposes ... ..	894	458	1,352	895	72	967
Dredging ... ..	*4,368	...	4,368	*2,677	...	2,677
Applications for Authority to Prospect ... ..	36,785	...	36,785	14,045	...	14,045
Other Mining Titles ... ..	710	...	710	840	...	840
Total ... ..	313,324	205,801	519,125	230,615	209,192	439,807

\* Includes private lands.

The annual rent for mining leases of Crown lands is 2s. per acre and of private lands 20s. per acre in respect of the surface actually occupied. The rent for dredging leases is 2s. 6d. per acre in respect of Crown lands, and it is assessed by the wardens in open court in respect of private lands.

Rentals received by the State from mining leases amounted to £16,433 in 1943-44, £17,027 in 1944-45, and £16,032 in 1945-46.

#### Mining Royalties.

Royalties are payable to the Crown in respect of the minerals won, except in certain cases where they have been obtained from private lands held without reservation of minerals to the Crown. The royalty on coal and shale is charged at the rate of 6d. per ton, and on other minerals at the rate of 1 per cent. of the value.

Royalty in regard to mining on private lands held without reservation of minerals to the Crown is collected by the Department of Mines on behalf of the owner. The rates are 6d. per ton of coal and shale, and 1½ per cent. of the gross value of other minerals, except gold. The Department retains one-sixth and one-ninth respectively of these amounts, and pays the balance to the owner of the minerals. The royalty on gold is payable to the Crown in all cases.

Royalty may be remitted under certain conditions as prescribed by the Mining Act, *e.g.*, if the gross annual output of minerals, other than coal and shale, won from Crown land under mining lease does not exceed £500. In many cases rents may be deducted from the royalties.

Particulars of royalty collected in each year since 1939-40 are shown below:—

TABLE 652.—Royalty on Minerals, 1939-40 to 1945-46.

Mineral.	Year ended 30th June—						
	1940.	1941.	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£	£	£
Coal ... ..	205,621	183,015	220,000	262,167	249,403	261,131	224,694
Silver, Lead, Zinc ... ..	23,001	37,772	67,381	82,346	38,894	53,785	86,087
Other ... ..	11,639	11,598	15,820	11,685	12,210	11,037	10,257
Total Royalty ... ..	240,261	232,385	303,201	356,198	300,507	325,953	321,038

## WAR-TIME CONTROL OF MINERALS PRODUCTION.

A Controller of Minerals Production was appointed by the Commonwealth in terms of National Security (Minerals) Regulations to act in co-operation with the Department of Mines in the various States to ensure adequate production of minerals throughout Australia, other than coal, for which other provision was made. These regulations were continued in force to 31st December, 1947 by the Defence (Transitional Provisions) Act, 1946.

The Controller may take possession of land and use it for production and supply of minerals and grant financial assistance and make contracts and agreements for such purposes. From the inception of these arrangements in 1942 up to 30th June, 1947 the Commonwealth expended £2,870,164 against which receipts were £569,163. Details concerning activities in New South Wales are not available.

## ENCOURAGEMENT OF PROSPECTING FOR MINERALS.

Financial assistance is provided from State public revenues to encourage prospecting for minerals and to assist miners to open up new fields. Miners desiring a grant for prospecting must satisfy the Prospecting Board that the locality to be prospected is likely to yield the mineral sought and that the mode of operation is suitable for its discovery. The amount advanced is to be refunded in the event of the discovery of payable mineral by means of the aid.

The following statement shows a summary of the amounts allotted to prospectors for the various minerals since 1921. Sustenance at the rate of £1 a week paid to unemployed persons engaged in prospecting in the years ended June, 1931 to 1935 is not included in the table; the amount was: £46,966.

TABLE 653.—Grants Allotted to Prospectors, 1921 to 1946.

Period (years ended 30th June).	Amounts allotted to Prospectors for—						Total.
	Gold.	Silver and Lead.	Copper.	Tin.	Coal.	Other Minerals.	
	£	£	£	£	£	£	£
1921-1925	44,926	8,009	3,709	8,478	1,713	4,578	71,413
1926-1930	36,780	12,027	3,582	12,293	1,055	6,395	72,132
1931-1935	94,459	1,405	17	3,031	...	2,486	101,398
1936-1940	79,983	5,030	257	10,755	...	7,793	103,818
1941-1945	7,972	473	2,606	5,998	...	7,288	24,337
1939	10,531	3,320	...	1,603	...	781	16,235
1942	1,169	51	1,215	1,446	...	2,819	6,700
1943	34	248	467	1,259	...	2,482	4,480
1944	285	47	460	779	...	540	2,111
1945	807	38	...	453	...	493	1,791
1946	1,593	200	30	2,485	...	412	4,720

In each year some of the prospectors fail to complete the works for which aid has been granted, and the amounts allotted are not paid in full. The actual expenditure recorded under this heading in 1945-46 was £23,951.

The Commonwealth Government also has provided financial assistance from time to time to encourage prospecting and the development of mineral resources.

## INSPECTION OF MINES.

The inspection of mines with a view to safeguarding the health and safety of miners is conducted by salaried officers of the Department of Mines in terms of the Coal Mines Regulation Acts, which apply to coal and shale mines, and the Mines Inspection Acts, which apply to other mines. Certain provisions of the latter Acts were extended to quarries as from 1st August, 1945 and may be made applicable to dredges by proclamation by an amending Act of 1945.

The Coal Mines Regulation Acts prescribe that every coal mine must be under the control and direction of a qualified manager, and daily personal supervision must be exercised by him or by a qualified under-manager. In mines where safety-lamps are used a competent person must be appointed as deputy to carry out duties for the safety of the mine, especially in regard to the presence of gas, the sufficiency of ventilation, the state of the roof and sides, and the supervision of shot-firers.

The Acts contain general rules for the working of coal mines in regard to such matters as ventilation, sanitation, the inspection and safeguarding of machinery, safety lamps, explosives, security of shafts, etc. It is provided that a person may not be employed in getting coal or shale at the face of the workings of a mine unless he has had two years' experience or works in company with an experienced miner. Special rules are established in each mine for the safety, convenience, and discipline of the employees.

The Governor may appoint a District Court judge, a stipendiary or police magistrate, or a mining warden to sit as a Court of Coal Mines Regulations to determine matters relating to the safe working of the coal mines. Courts have been proclaimed at East Maitland, Newcastle, Muswellbrook, Gunnedah, Sydney, Wollongong, Lithgow, and Mudgee.

The Mines Rescue Act makes provision for rescue operations in coal and shale mines by the establishment of rescue stations, rescue corps, and rescue brigades. In four districts, viz. the Western, Southern, Newcastle, and South Maitland, central rescue stations have been established, and the mine owners in each district are required to contribute to a fund for their upkeep. The rates of contribution for the year 1946 were as follow:—Western, 0.75d.; Southern, 0.75d.; Newcastle, 0.507d.; and South Maitland, 0.266d. per ton of coal raised during the preceding year. The amount contributed was £20,784 in 1946; the contributions in each year are calculated on the output of the preceding year.

A Royal Commission was appointed by the Government of New South Wales in August, 1938 to inquire into matters relating to the safety and health of workers in coal mines. The Commission reported that the fatality rate in coal mines is not higher than in other mines in New South Wales and it is more favourable in New South Wales than in Great Britain or the United States of America. About 50 per cent. of the serious accidents in New South Wales have been caused by falls of roof and sides and 7½ per cent. of the fatal accidents were connected with haulage. After this inquiry the Coal Mines Regulation Act was amended in 1941 to require improved standards of ventilation and equipment, methods of safe working, and control of dust.



In the mines to which the Mines Inspection Acts relate, a qualified manager, exercising daily personal supervision, must be appointed if more than ten persons are employed below ground, and the machinery must be in charge of a competent engine-driver. General rules are contained in the Act, and the inspectors may require special rules to be constituted for certain mines. Additional requirements to increase the efficacy of these measures were imposed by the amending Act of 1945.

Certificates of competency to act in mines as managers, under-managers, deputies, engine-drivers, and electricians are issued in accordance with the Acts relating to inspection.

The records of the Department of Mines show the following particulars regarding persons killed or reported as seriously injured in accidents in mining and quarrying during the ten years 1937 to 1946:—

TABLE 654.—Mining Accidents, 1937 to 1946.

Year.	Accidents.				Per 1,000 Employees subject to Mining Acts.			
	Coal and Shale Miners.		Other Miners and Quarrymen.		Coal and Shale Miners.		Other Miners and Quarrymen.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1937	26	68	19	250	1·74	4·54	1·26	16·58
1938	11	65	17	265	·69	4·10	1·10	17·17
1939	15	81	13	212	·90	4·86	·93	15·12
1940	20	60	16	260	1·15	3·46	1·12	18·15
1941	26	79	11	259	1·48	4·51	·93	21·87
1942	23	75	8	178	1·32	4·30	·77	17·24
1943	19	91	15	126	1·07	5·12	1·46	12·27
1944	26	69	6	80	1·47	3·89	·67	8·96
1945	14	82	7	112	·79	4·64	·83	13·29
1946	13	97	6	163	·74	5·70	·62	16·73

The accident rates are not based on the number of employees as shown in Tables 623 to 625. They relate to the total number of persons who are subject to the provisions of the Mining Acts, including persons engaged in connection with treatment plant at the mines, and in quarries. No allowance was made in calculating the rates for variations in the average number of days worked in each year. Particulars of the average time worked in coal mines are shown in Table 632.

Allowances paid to beneficiaries under the provisions of the Miners' Accident Relief Act amounted to £8,679 in 1944, £7,822 in 1945, and £7,368 in 1946. The beneficiaries at the end of 1946 were: widows, 102; sisters, 2; and permanently disabled persons, 87. These allowances relate to accidents which occurred prior to 1st July, 1917. Compensation in respect of accidents which occurred later and compensation for miners and quarrymen who contract industrial diseases such as silicosis or lead poisoning are payable under the Workers' Compensation Act and other Acts, of which particulars are shown in the chapter "Employment" of this Year Book.

A pension scheme for coal and oil shale mine workers in New South Wales which commenced in November, 1941 is described in the chapter "Social Condition" of this Year Book.

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## FOOD AND PRICES.

### FOOD SUPPLY AND DISTRIBUTION.

The principal food commodities consumed in New South Wales are beef, mutton and lamb, bread, processed cereals, milk, butter, eggs, sugar, jam, potatoes, tomatoes and a wide variety of other vegetables and fruit. Supplies of nearly all these commodities are produced within the State, but those of potatoes and some fruits are drawn in part from other Australian States. Tea is the popular household beverage, and is wholly imported. The consumption of poultry, pork, bacon, ham, fish, cheese and coffee is comparatively small.

Standards for the composition, purity and quality of foods are prescribed by regulations under the Pure Foods Act. The Commonwealth Department of Trade and Customs exercises supervision in regard to the composition and labelling of oversea imports of food and drugs. The administration of the food laws in incorporated towns and the supervision of conditions under which food is produced and distributed are duties of the Board of Health and the municipal and shire councils.

Standard weights and measures are prescribed in terms of the Weights and Measures Act. These are generally the standards of the United Kingdom and traders' weighing and measuring appliances must be kept to a specified degree of accuracy. The weight of bread is regulated under the provisions of the Bread Act of 1901, the standard weights for loaves being 1 lb., 2 lb. and 4 lb.

The councils of municipalities and shires may establish public markets and regulate hawking and peddling of food commodities within the incorporated areas. Outside the City of Sydney, however, there are few markets except saleyards for livestock.

A description of the arrangements for the marketing of vegetables, fruit, farm produce, fish, and poultry in New South Wales is given on page 489 of this volume. The markets established by the Municipal Council of Sydney in the city, which incorporate cold storage works, the Alexandria Goods Yards and the Darling Harbour wharves and adjacent produce stores are the principal marketing centres. The business conducted at the municipal markets consists for the most part of sales by producers or their agents to retail traders.

Agents who sell farm produce on commission, such as vegetables, fruit, eggs and poultry, must be licensed and operate in accordance with the Farm Produce Agents Act, 1926-1932, further particulars regarding which are given on page 491 of this Year Book. The marketing of fish has been controlled by the State Fisheries Department since 17th September, 1945 (see page 587).

The Marketing of Primary Products Act, 1927-1938 authorises the formation of marketing boards in respect of primary products upon the request of the producers. To constitute a board for any product, a poll

must be taken of the producers of the product who are enrolled on the Parliamentary electoral rolls, votes must be given by at least three-fifths of those entitled to vote, and more than half the votes must favour its constitution. The Director of Marketing administers the Act, and the State Marketing Bureau, under his supervision, affords assistance to producers in regard to the marketing of their products, and collects and publishes information relating to market conditions. Marketing boards are in operation for rice, eggs, wine grapes and navy beans. A Potato Marketing Board has been formed but is not yet engaged in marketing operations.

#### WAR-TIME CONTROL OF SUPPLIES OF COMMODITIES.

General authority was vested in Ministers of the Commonwealth by the National Security Act, 1939 and amendments, to regulate production, storage, distribution, use or consumption of essential articles when necessary in the interests of the defence of the Commonwealth or the efficient prosecution of the war or for the maintenance of essential supplies and services. Certain of these powers were retained under Defence (Transitional Provisions) Acts of 1946 and 1947 to ensure an orderly return to peace-time conditions.

Arrangements made during the war years brought practically all essential commodities under administrative control. Special bodies were set up to deal with production of the rural industries, factory production of food, the supply and distribution of essential materials, procurement of supplies for the Services, distribution of food for civilians, control of exports, the importation of goods from overseas under Lend-Lease arrangements with the United States of America, and otherwise, and for liaison with manpower, rationing and prices authorities and United Kingdom and Allied Nations supply organisations.

The Australian Food Council was established in April, 1942 to endeavour to ensure adequate supplies of food for military and civilian needs. Later, when requirements for the Forces and for exports were expanding rapidly, National Security (Food Control) Regulations were issued in June, 1943, providing for control of production and use of food for human consumption, fertilisers for agriculture, and fodder for livestock. In the following month the Civilian Requirements Board was set up to overcome, as far as possible, shortages in civilian supplies.

In the regulation of local consumption the production of some non-essential goods or types of goods was curtailed or prohibited, restrictions were placed upon the importation of certain goods, and supplies of many commodities were allocated on a quota basis to ensure equitable distribution.

Relaxation of these war-time controls began in the later phases of the war, and relatively few of them remained operative at the close of 1947.

#### RATIONING OF FOOD AND OTHER COMMODITIES.

From 1942 onward the rationing to civilians of certain foodstuffs, of clothing and of a number of other commodities became necessary in Australia. Foodstuffs were rationed to ensure maximum supplies for the Services, the United Kingdom and for Allied needs (tea, fairly to distribute the reduced supplies available); clothing, because of a sharp fall in imports

of textiles and the diversion of supplies and productive resources to meet war contracts, and certain other commodities in restricted supply, to apportion them equitably amongst civilian consumers.

Particulars regarding the rationing of liquid fuels and tyres are given in the chapter "Motor Vehicles" (page 219), and of tobacco and liquor in the chapter "Social Condition" of this Year Book. Of these commodities, only liquid fuel remains under official rationing, but because tobacco supplies still fall short of demand, the manufacturers and distributors voluntarily continue to distribute them in the same manner as under the official scheme.

Subject to the control of the Minister for Trade and Customs, the Rationing Commission, of three members, formulated rationing policy in regard to foodstuffs and clothing. The rationing scheme is administered by the Director of Rationing, who has the assistance of Deputy Directors with staff in each capital city.

During the war years the establishment of new businesses dealing in rationed goods was restricted, but since the war ended the opening of those which involve merely the supply of goods against coupons has been permitted. Except that special consideration is given to ex-service personnel seeking to resume their normal class of business, restrictions still apply to the establishment of businesses such as cafes, etc., in which coupon-free consumption or the use of rationed goods is involved.

The electoral organisation and an adaptation of election procedure has been used for the distribution of food and clothing coupons to consumers. The issue of special coupons has been made through the Services, schools, etc., and from the Commission's offices upon individual application. Coupon issues were made in June of each year, 1942 to 1945, and in December of 1946 and 1947. Consumers may use their coupons for purchases of rationed goods from any supplier, and trafficking in coupons is illegal. Traders pass on the coupons to warehousemen or manufacturers to replenish their stocks, and these, in turn, surrender them to the Commission with a monthly return of coupon goods supplied. The methods of rationing tea (from April, 1942) and clothing, blankets, household linen, etc., prior to introduction of coupon rationing are described at page 521 of the Year Book for 1941-42 and 1942-43.

#### *Rationing of Food.*

Distinctive food coupons were provided in the general food ration books for persons above nine years of age and children aged five to nine years and of under five years, until December, 1946, and since then for persons up to six years of age and persons above that age. This permitted of ration variations, e.g., young children are excluded as regards tea and received a smaller meat ration. The history of food rationing throughout the war years is given in the Official Year Book of the Commonwealth of Australia (see No. 36, page 1088, *et seq.*). Features of the rationing arrangements were differentiation as regards children, the issue of special food coupons to service men and women on leave and to expectant mothers, certain classes of invalids and to persons in isolated areas, and the issue of food permits to cafes, restaurants and other establishments supplying casual meals (not requiring surrender of coupons). A system of egg priority supply was operated for the benefit of expectant and nursing mothers, young children and invalids during the months February to July, 1945.

The following statement indicates the kinds of food rationed by coupons under the Commission's administration, the dates of commencement of rationing and of variations in ration allowances, and the normal quantities allowed per general consumer:—

TEA.	Rationing by coupons introduced (8 oz. per 5 weeks). (Tea rationing based upon consumer registration with supplier operated from 1st April, 1942.)	6th July, 1942.
	Ration increased to 8 oz. per 4 weeks.	19th October, 1942.
SUGAR.	Rationing introduced (1 lb. per week).	31st August, 1942.
	Rationing terminated.	30th June, 1947.
BUTTER.	Rationing introduced (8 oz. per week).	7th June, 1943.
	Ration reduced to 6 oz. per week.	5th June, 1944.
MEAT.	Rationing introduced (average 2½ lb. per week).	17th January, 1944.
	Ration reduced by approximately 8¾ per cent.	26th February, 1945
	Ration further reduced by 12½ per cent.	7th May, 1945.
	Rationing terminated.	21st June, 1948.

Residents in specified remote areas are allowed 50 per cent. more than the normal ration of tea (and sugar whilst rationed) and workers in isolated areas where alternative foods are not available were granted a similar increase in the meat ration. No tea ration was available for children under nine years of age prior to June, 1946, when those aged six to nine years were made eligible. A small supplementary allowance of tea was made on a few occasions, and extra sugar was made available for jam making from time to time whilst rationing was operative.

For meat rationing the various classes and cuts of meat were divided into six groups; the ration allowance in each group varied according to the cut and bone and fat content. The ration from May, 1945 to June, 1948 was estimated to equal about 1 5-6th lb. per person per week over six years of age and about 1 lb. for children aged up to six years. Certain classes of meat, *i.e.*, sausages, edible offals, canned meats, poultry, rabbits, fish, bacon and ham, were not rationed. Meat vendors replenished their supplies by passing coupons received from consumers to wholesale butchers, but those who slaughtered for themselves supplied periodical returns and surrendered coupons to the Commission. An allowance of 3 per cent. was made to cover shop shrinkage and spoilage.

The food coupons are named or lettered distinctively and numbered consecutively, and become available as nominated for use in fixed ration periods. Each kind of coupon may be used only within a specified period; currently, coupons for tea may be used up to twelve weeks after becoming available, but do not carry over the end of the rationing year, and those for butter may be used only during currency of each four-weekly ration period. Whilst sugar was rationed coupons for it could be used up to specified dates as announced from time to time.

Apart from the general system of food rationing, certain foods, *e.g.*, milk (see page 721), were rationed during the war years by authorities other than the Rationing Commission and without the use of coupon systems. Bacon, ham, eggs and cream were subject to a measure of control and were available for civilian consumption only after the needs of the Services, etc. had been met.

*Rationing of Clothing and Piece Goods.*

Rationing of clothing and piece goods by coupons was applied in Australia as from 15th June, 1942, and of household drapery and furnishings as from June, 1943, and terminated on 21st June, 1948. The clothing coupon ratings were fixed to take account of the varying needs of men, women, children aged five to fifteen years, and infants, and in regard to individual garments, of their life, utility, amount of material involved, and the likely supply position. Lower coupon ratings were applied to working garments, for cheap frocks and shoes, and for damaged and imperfect goods, but otherwise ratings had no regard to price or quality of the goods.

From time to time the coupon ratings were varied to correct anomalies and to accord with the supply position. The most important of the changes were the substantial reductions in ratings made in June and July, 1945 on woollen garments, knitted wear, hosiery and woollen piece goods; the removal from control in November, 1945 of knitwear, footwear, headwear and some minor articles simultaneously with reduction in ratings for all-wool piece goods and garments; from June, 1946 the application of the woollen ratings to goods made partly of wool; and from July, 1947 a reduction of approximately 28 per cent. in the average rating for clothing and clothing piece goods. For household drapery, however, there were no significant changes in rating during the rationing period.

An issue of 112 clothing coupons to each person was made in June of each year, 1942 to 1945. In addition, special issues were provided for service personnel, outside children, expectant mothers, workers in industries severe on clothing, to ex-service men and women, and for household linen for newly set-up homes, boarding establishments, etc. In 1942-43 and 1943-44 only the first 56 of the coupons might be used in the first half of the year, and all the coupons expired with the close of the ration year. As a result, a mild buying rush occurred in the closing days of coupon currency, and to obviate this the currency of the second half of the 1944-45 coupon issue (and of special coupons) was extended until November, 1945. There was a general re-adjustment of the ratings on articles still couponed in November, 1945, which made the 56 coupons which then became available sufficient for average requirements from 15th November, 1945 to December, 1946, and accordingly 56 of the 112 coupons per person issued in June, 1945 were given currency until December, 1946, and the remaining 56 until 30th June, 1947. In December, 1946 an issue of 56 coupons with currency throughout 1947 was made. There was a further civilian issue of 56 coupons in December, 1947.

The following statement shows the number of coupons required to be surrendered to obtain some of the more important items of clothing under the original ratings, under the revised ratings of November, 1945, and as from July, 1947. The table does not show the several changes in the ration scales effected at other times during the period of rationing. For further details reference may be made to the Official Year Book of the Commonwealth of Australia, No. 36, page 1086.

TABLE 655.—Rationing of Clothing—Coupon Ratings of Selected Items.

Item.	Number of Coupons to be surrendered.								
	June, 1942.*			Nov., 1945.*			July, 1947.*		
	Based on individual issue of 112 coupons per annum.			Based on individual issue of 56 coupons per annum.			Based on individual issue of 56 coupons per annum.		
	Man.	Woman.	Child.	Man.	Woman.	Child.	Man.	Woman.	Child.
Overcoat, fully lined, woollen ...	40	27	18	20	14	10	11	10	7
non-woollen ...	43	30	20	30	20	15	17	14	10
Coat, lined, woollen ...	20	16	12	16	13	10	10	9	6
Trousers, slacks, woollen ...	10	9	8	8	7	4	6	6	3
non-woollen ...	12	11	9	10†	9†	6†	7	7	4
Waistcoat, no sleeves, woollen ...	8	6	4	6	5	3	4	4	3
Dress, unlined, woollen ...	13	10	...	7	5	...	5	5	3
non-woollen ...	13	10	...	13†	9†	...	8	8	5
Cardigan, long sleeves, woollen ...	9	7	5	†	†	†	†	†	†
Shirt, long sleeves, woven, woollen ...	10	9	6	†	6	3	5	5	2
non-woollen ...	12	10	7	12	7	4	7	5	3
Singlet, non-woollen, woven ...	7	5	4	3	2	3	3	2	2
knitted ...	5	4	3	†	†	†	†	†	†
Bloomers, non-woollen, woven ...	7	5	4	3	2	3	3	2	2
knitted ...	5	4	3	†	†	†	†	†	†
Corsets ...	...	4	...	...	4	...	3	...	...
Socks, stockings ...	4	14	2	†	†	†	†	†	†
Pyjama suit, woven, woollen ...	15	14	10	9	8	5	7	6	4
non-woollen ...	15	4	10	15†	14†	9†	9	8	5
Boots and shoes ...	12	8	3	†	†	†	†	†	†

\* See text preceding table regarding general adjustment affecting coupon rating and coupon period.

† Part wool mixtures treated as "non-woollen" until June, 1946; thereafter as "woollen."

‡ Coupon free.

Knitting wool became coupon-free in November, 1945. Coupon ratings for the main piece goods other than household drapery were varied mainly to encourage home dressmaking and preference for the more readily available woollen materials. For household drapery the ratings approximated those for clothing piece goods, except that for white and unbleached cotton cloth suitable for bed sheeting, the ratings remained unchanged until July, 1947 at from  $3\frac{1}{2}$  coupons (50-65 inches) to 6 coupons (85 inches or wider) according to width of the material. Made-up bed sheets were couponed at ratings equivalent to the content of material. The major variations in the coupon ratings for general piece goods were as shown below:—

TABLE 656.—Rationing of Piece Goods—Coupon Rating.

Width of Material (inches).	Coupons per yard to be surrendered.						
	June, 1942.	June, 1943.	June, 1945.	November, 1945.		July, 1947.	
				Woollen.	Non-woollen.*	Woollen.	Non-woollen.
3 and under 18 ...	2½	1½	1½	4	1½	3	1
18 " " 32 ...	2½	2½	2½	1	2½	1	1½
32 " " 40 ...	3½	3	2½	1½	2½	1½	2
40 " " 50 ...	4	4	3½	1½	3½	1½	2½
50 " " 60 ...	5	5	4½	2	4½	2	3½
60 " " 75 ...	6	6	5	2½	5	2½	4½
75 and over ...	6	6	6	2½	5	2½	5

\* Wool mixtures treated as "non-woollen" until June, 1946; thereafter as "woollen".



## BLACK MARKETING ACT, 1942.

By the Black Marketing Act, 1942, severe penalties may be imposed on persons or corporations convicted of offences in contravention of the National Security Regulations such as illegally selling or purchasing goods or services at prices or charges greater than the maximum fixed prices, illegally selling, supplying, acquiring or accepting rationed goods or services or those subject to prohibition or restriction, or producing or manufacturing goods otherwise than in accordance with the Regulations, illegally selling or acquiring goods vested in the Commonwealth, illegally using or dealing with licences, ration tickets or coupons, or making or uttering counterfeit or forged licences, ration tickets, coupons, etc.

## WAR-TIME RESTRICTION ON RETAIL DELIVERY SERVICES.

Retail delivery services were curtailed drastically during the war years under National Security Regulations. The nature of the restrictions and their field of application were described on page 522 of the 1941-42 and 1942-43 edition of the Year Book.

The restrictions were removed as from 12th November, 1946 and the Government of New South Wales has undertaken to legislate to require traders to make household deliveries again as in the pre-war years. The war-time block delivery systems for milk, bread and ice also have ceased to have legal force, but a general resumption of competitive trading in these commodities has not taken place.

## ESTIMATED CONSUMPTION OF FOOD COMMODITIES.

Lack of the necessary data regarding interstate trade and of stocks carried over from one period to another render it impracticable to compile satisfactory estimates of the consumption of food in New South Wales.

The Commonwealth Statistician has undertaken the preparation of reports, to be published half-yearly, on "Food Production and the Consumption of Foodstuffs and Nutrients in Australia". These reports, the first of which related to the year ended 30th June, 1947, give a statistical survey of foodstuffs produced and exported overseas and the quantities put to industrial and non-food uses, enabling estimates to be made, after allowing for changes in stocks and imports, of the quantities available for human consumption in Australia. A section of the report deals with the level of nutrient intake. In this latter regard the analysis for 1946-47 showed that the average daily per capita quantity of food moving into civilian consumption in Australia supplied a satisfactory level of nutrients, with the possible exception of calcium.

The consumption of food of the different kinds varies considerably as between different parts of the Commonwealth and it is unlikely that the average per capita consumption in New South Wales is the same in kind and quantity as that shown for Australia in the table which follows. The differences, however, are not likely to be very great in the cases of most commodities, and it is probable that the changes during the war and early post-war years revealed in the table were experienced in New South Wales in common with the Commonwealth as a whole. The estimates for 1946-47 include consumption by services in Australia and mostly are subject to revision.

TABLE 657.—Per Capita Consumption of Food, Australia.

Commodity.	Consumption per Head per annum.		Commodity.	Consumption per Head per annum.	
	Av. 1936-37 to 1938-39.	Year ended June, 1947.		Av. 1936-37 to 1938-39.	Year ended June, 1947.
Milk, Fluid, whole gal.	23.6	28.1	Potatoes, white ...lb.	103.9	131.0
Butter.....lb.	33.0	25.3	Tomatoes.....lb.	15.7	30.5
Cheese.....lb.	4.4	6.1	Citrus fruits.....lb.	31.9	35.4
Beef and veal, bone in*.....lb.	144.2	102.6	Non-citrus fruits...lb.	86.0	95.8
Mutton and lamb, bone in*.....lb.	74.9	71.5	Jam.....lb.	11.4	14.0
Other meat*.....lb.	29.0	30.7	Dried fruit.....lb.	8.4	7.9
Poultry and rabbits lb.	9.7	16.2	Canned fruit.....lb.	10.7	8.4
Fish, fresh and canned.....lb.	11.2	8.7	Flour†.....lb.	187.3	203.1
Eggs, all forms...No.	241	267	Breakfast foods§...lb.	9.0	10.8
Margarine and Lard lb.	5.4	7.0	Rice, milled.....lb.	4.0	1.1
Refined sugar†.....lb.	119.6	114.5	Tea.....lb.	6.9	6.7
			Coffee.....lb.	0.6	1.1
			Vegetables.....lb.	128.0	133.5

\* Carcass weight; other meat includes pork, offal, canned meat and bacon and ham. † Including sugar in manufactured foodstuffs. ‡ Including flour used in bread. § Oaten and wheaten only.

### Meat.

In Australia meat for local consumption as well as for export has been subject to Commonwealth control since October, 1942. An outline of the provisions governing the production and disposal of meat is given on page 534, *et seq.* of this volume. Release of meat for local consumption was effected under a system of quotas until August, 1946. From January, 1944 until June, 1948 household supplies were rationed by coupons (see page 712).

In the county of Cumberland, which embraces the metropolitan area, the slaughter of stock and the sale of meat are under the control of the Metropolitan Meat Industry Commissioner, appointed by the Governor. The State Abattoir at Homebush Bay, controlled by the Commissioner, is near the stock saleyards. The carcass butchers purchase stock on the hoof, and deliver them at the Abattoir where they are slaughtered and treated by the staff of the Abattoir and the chilled carcasses are delivered to the owners early on the following morning.

The Council of the City of Greater Newcastle controls slaughtering and inspection within a radius of fourteen miles of the Newcastle Post Office, and operates the Newcastle District Abattoir; there are livestock saleyards at Waratah. Outside the county of Cumberland and the Newcastle district slaughtering is done at private abattoirs, which are subject to inspection by officers appointed by the local authorities and by the Board of Health. A large quantity of meat for consumption in the Metropolitan area is obtained from country abattoirs.

The average retail prices of meat are shown in Tables 666 and 668, and further particulars relating to the meat supply are published in the chapter of this volume entitled "Pastoral Industry".

### Fish.

The supply of fresh fish is obtained in the river estuaries and coastal lakes and inlets, and by deep-sea trawling. The catch of New South Wales fisheries in 1945-46 was 30,668,852 lb., including 12,791,875 lb. obtained by trawlers. Preserved fish is supplied almost entirely by importation, and between 1942 and 1946 was not available for civilians.

In the metropolitan district, the wholesale marketing of fresh fish is centralised in Sydney in the Municipal Market. Sales in the market were conducted by licensed agents until 17th September, 1945, when the agents' licences were cancelled and control of the wholesale distribution of fish was vested in the Chief Secretary of New South Wales, pending re-organisation of the industry on a co-operative basis (see page 587).

#### *Bread and Flour.*

The average consumption of bread in New South Wales is estimated at about 100 loaves (2 lb.) per head per annum.

The quantity of flour consumed each year is estimated to be in the vicinity of 290,000 tons, including approximately 214,000 tons used for bread, making the per capita consumption approximately 200 lb. per annum, including 150 lb. used for bread. Biscuit factories make biscuits for export as well as for local consumption, and used 25,191 tons of flour in 1941-42, 34,906 tons in 1942-43, 28,239 tons in 1943-44, 18,295 tons in 1944-45, and 15,113 tons in 1945-46.

The bread supply of the metropolitan area is distributed by the bakers, by retail delivery to the consumers' homes, and by delivery at wholesale rates to retail shops, where it is sold "over the counter" to consumers; only a small quantity is sold to consumers at the bakeries.

A Bread Research Institute was established in May, 1947 by the Bread Manufacturers of New South Wales to engage in research and to afford technical advice to bakers. Its establishment followed upon recommendations by Dr. D. W. Kent-Jones, an eminent English specialist, who visited New South Wales and reported upon the industry at the instance of the Association.

War-time control of the bread industry applied in the county of Cumberland from 20th August, 1942 to 25th February, 1946. National Security Regulations required manufacturers and distributors of bread to be licensed in respect of their premises and of defined areas of distribution, and prohibited the making of bread of certain types and the slicing and the wrapping of bread. They also gave legal force to the block or zone system of household deliveries already organised in Sydney, Newcastle and other towns (in the metropolitan district, from 30th March, 1942) at the request of the Commonwealth Government and confined bread deliveries in each zone to a single distributor.

#### *Prices of Flour and Bread.*

An outline of the systems under which the prices of flour and of bread were fixed by associations of millers and bakers, respectively, before these commodities were proclaimed as commodities under the National Security (Prices) Regulations of the Commonwealth in September, 1939 is given on page 24 of the 1940-41 edition of the Year Book. Details of prices of bread as fixed by the Prices Commissioner from 13th October, 1941 and 18th May, 1942 are given also in that edition.

#### *Bread Industry (County Cumberland) Inquiry.*

In September, 1943 the Industrial Commission was required to inquire into the bread industry in the County of Cumberland, particularly in regard to the health of employees, the quality of bread, the effect upon

costs of its operation under the war-time arrangements (indicated above) and as to any resultant possible reduction in the price of bread to consumers. The inquiry was undertaken by Mr. Justice Kinsella, a member of the Commission.

The Commission concluded that there were no occupational diseases or particular health hazards in the bread industry. It recommended that steps be taken to ensure adequate lighting and ventilation in bakehouses but did not propose any alteration in hours for operatives.

In the Commission's opinion bread was unsatisfactory in quality, and mainly so because of the low protein content and protein quality of the flour used, which, in turn, was due to the moderate milling quality of wheat available for making flour. In many bakeries the lack of skill and knowledge and unsuitability of premises and equipment were contributing factors.

Remedial measures recommended included the establishment of a wheat and flour research institute with the object of improving the quality of wheat, flour and bread; the growing of wheat of varieties yielding better bakers' flour; compulsory specification by millers of the protein quality of each consignment of flour supplied to bakers; provisions to facilitate training of operatives, to ensure efficiency of bakers and the use of suitable premises for baking and delivery; amendment of Pure Food regulations to establish a standard of bread; and the appointment of a nutritional committee to inquire into the value of bread as a basic article of diet.

The Commission's findings as to the cost of production of bread were based on the accounts of 28 master bakers, accepted as fairly representative of the 312 master bakers in the County of Cumberland (some with more than one bakery), who used about 1,660 tons of flour per week, and on the assumption that 1,350 (not 1,330 as previously accepted) loaves were produced per ton of flour. From these accounts the following particulars of the cost of manufacture and distribution of bread in the County of Cumberland were compiled:—

TABLE 658.—Bread—Cost of Production and Selling Price Per 2 lb. Loaf, 1939 to 1943.

Particulars.	1939.	1940.	1941.	1942.	1943.
	d.	d.	d.	d.	d.
Cost of manufacture—					
Flour ... ..	1·79	2·07	2·06	2·06	2·11
Other ingredients ... ..	·25	·27	·27	·26	·23
Bakehouse wages ... ..	·59	·60	·61	·65	·64
Fuel, power, light ... ..	·13	·14	·16	·17	·18
Repairs, etc., and other bakehouse costs ... ..	·11	·15	·19	·19	·15
Depreciation ... ..	·14	·14	·13	·13	·12
Total ... ..	3·01	3·37	3·42	3·46	3·43
Cost of distribution and overhead expenses ... ..	1·90	2·02	2·01	1·99	1·45
Total Cost ... ..	4·91	5·39	5·43	5·45	4·88
Selling price ... ..	5·24	5·51	5·46	5·41	5·19
Profit ... ..	·33	·12	·03	(—)·04	·31

The selling prices shown above relate to sales to other purchasers as well as householders. The details in the table indicate that profit per loaf declined steadily from 1939 to 1941 and that there was a loss in 1942. Under zoning and other controls operations became profitable again in 1943.

The average profit of .31d. per loaf in 1943 was "somewhat higher than the farthing which is a fair profit for the baker", but the Commission considered it not unreasonable or unfair to the public and that improvement in quality would be more beneficial than reduction in price.

The Commission reported that the effect of war-time controls on costs did not warrant a reduction in price when other factors affecting costs were taken into account. An Advisory Committee consisting of representatives of organisations of bread manufacturers and employees in the industry reviewed the Commission's report. The Committee recommended that a central authority be constituted to control the manufacture and distribution of bread and to provide technical advice; the institution of a system of delivery which, while avoiding wasteful duplication of services, would provide the consumers with a choice of bakers; a change in hours for bakers to eliminate night baking; standards for ingredients and for bread; and the control of prices of bread.

#### *Bread Industry Act, 1946.*

The hours of baking recommended by the Committee were introduced as from 1st July, 1946 in the Counties of Cumberland and Northumberland in terms of the Bread Industry Act, 1946.

For three years prior to this change the commencing times for operative bakers (except dough makers) in the County of Cumberland, as prescribed by industrial award, had been 5.30 a.m. on an ordinary working day, midnight for a "double delivery day", *i.e.*, a day preceding a holiday, and 10 p.m. or 11 p.m. for a treble delivery day.

Under the Bread Industry Act the ordinary commencing times for baking are 4.30 a.m. on Mondays, 5.30 a.m. on Tuesdays, Wednesdays and Thursdays, and 4 a.m. on Fridays. Baking at night or on Saturdays or Sundays is prohibited except where provision is made for commencing work at 10 p.m. or midnight on certain days preceding holidays. Delivery of bread is prohibited, except "over the counter", at bakehouses or shops, after 11 a.m. on Saturdays or 7 p.m. on a Saturday which is a "treble delivery day".

The Bread Industry Act is operative also in the Wollongong and Blue Mountains areas and in a number of other cities and towns.

The following statement shows the "official prices" of bread in Sydney recommended to members by the Master Bakers' Association or fixed by the

Prices Commissioner at each date of change since 1920 in comparison with the price of flour (including tax when payable) on these dates; flour ceased to be taxed as from 22nd December, 1947:—

TABLE 659.—Bread and Flour Prices in Sydney, 1920 to 1947.

Date of change in price of Bread.	Price of Bread per 2-lb. loaf.		Price of Flour per ton.	Date of change in price of Bread.	Price of Bread per 2-lb. loaf.		Price of Flour per ton.
	Cash over counter.	† Cash delivered.*			Cash over counter.	† Cash delivered.*	
	d.	d.	£ s. d.		d.	d.	£ s. d.
1920—				1932—			
Jan. 1 ...	4½	4¾	12 15 0	Jan. 1 ...	4½	5½	10 0 0†
Feb. 1 ...	5½	5¾	16 7 6	1933—			
Feb. 9† ...	6	6¼	19 2 6	Dec. 4 ...	5	6	11 15 0†
Dec. 13† ...	6¼	6½	19 7 6	1934—			
1921—				June 1 ...	4¼	5¼	7 5 0
Sept. 26† ...	6½	6¾	20 17 6	Aug. 13 ...	4½	5½	9 15 0
Dec. 10† ...	4¾	5	12 0 0	1935—			
1924—				Mar. 25 ...	4¾-5\$	5½	11 2 6†
July 21 ...	5	5½	14 10 0	Oct. 21 ...	5-5¼	5½-5¾	12 12 6†
Oct. 20 ...	5¼	5½	15 5 0	1936—			
1925—				Feb. 25 ...	4½	5	9 10 0
Jan. 5 ...	5½	5¾	15 15 0	Aug. 17 ...	5	5½	12 0 0
1926—				1937—			
May 10 ...	5¾	6	15 0 0	Jan. 25 ...	5¼	5¾	12 15 0
July 12 ...	6¼	6½	15 15 0	April 19 ...	5½	6	13 7 6
Dec. 6 ...	6	6¼	13 10 0	Sept. 6 ...	5¼	5¾	12 5 0
1927—				1938—			
Jan. 31 ...	5¾	6	12 10 0	July 10 ...	5	5½	9 0 0
Sept. 19 ...	6	6¼	13 15 0	Dec. 16 ...	5½ ¶	6	12 10 0†
1928—				1941—			
Feb. 13 ...	5¾	6	12 15 0	Oct. 13 ...	5¾ ¶	6¼ ¶	12 13 0†
1929—				1942—			
Feb. 4 ...	5½	5¾	11 0 0	May 18 ...	5½ ¶	6 ¶	12 13 0†
1930—				1947—			
June 30 ...	5	5½	10 5 0	Nov. 8 ...	5¾ ¶	6½ ¶	13 10 6†
Sept. 1 ...	4¾	5¼	9 10 0	1948—			
Oct. 20 ...	4½	5	8 15 0	Jan. 23 ...	6 ¶	7 ¶	16 4 9
1931—							
Mar. 29 ...	5	5½	10 0 0†				

\* Cash daily or weekly. † Prices fixed by Profiteering Prevention Court. ‡ Including tax. § 4½d. per loaf (2 or more loaves); 5d. per single loaf. The prices at this date were those recommended by Royal Commission. ¶ Proclaimed price—¼d. less in inner industrial suburbs and ¼d. more in extreme area, except from 23rd January, 1948, when prices in outer suburbs and the extreme area were the same.

The price of bread delivered by bakers to shops in the period covered by the table was ½d. per loaf less than the cash over counter price, except between March and October, 1935, when the wholesale price was 4s. 4½d. per dozen loaves.

#### Butter and Cheese.

Butter is in general consumption throughout Australia. The local product is choice in quality and exceeds local requirements. Annual consumption in New South Wales exceeded 34 lb. per head prior to June, 1943, when rationing began. Arrangements for supervision of the manufacture of butter and other dairy products, the system of marketing and of war-time control, and of subsidies provided by the Government are described in the chapter "Dairying Industry" of this Year Book. As a result of marketing organisation, seasonal fluctuations in the prices of factory butter had been eliminated before war-time control of prices was introduced. Between May, 1934 and December, 1947 there were four changes

only in the wholesale price of butter in Sydney, viz., an increase from 140s. per cwt. to 149s. 4d. in June, 1937, to 158s. 8d. in June, 1938, to 166s. 10d. in March, 1942, and to 192s. 6d. from 1st December, 1947. Butter is marketed in 56 lb. cases and an additional charge of 2s. 6d. per cwt. is made for the cases. The retail price of butter was increased from 1s. 5d. per lb. to 1s. 6d. in June, 1937, to 1s. 7d. in June, 1938, to 1s. 8d. in March, 1942, to 1s. 11½d. in December, 1947 and to 2s. 2d. in June, 1948.

Comparatively little cheese is consumed in New South Wales. The estimated consumption per head in pre-war years was about 4 lb. but coupon rationing of butter and meat has resulted in a somewhat greater use of cheese.

#### *Fresh Milk.*

The milk supply of Sydney is derived partly from dairies within the metropolitan area but mainly from country districts, viz., the South Coast district between Wollongong and Nowra, the districts traversed by the Main Southern Railway between Liverpool and Moss Vale, the Penrith, Windsor, and Richmond districts, the districts around Singleton, Brantston and Maitland on the Northern Railway line, and those in the neighbourhood of Dungoon on the North Coast line.

The milk produced in metropolitan dairies and distributed by the producers tends to decrease as population spreads and dairy lands are diverted to other uses. The greater part of the milk consumed in and around Newcastle is supplied by dairies outside the district.

The following statement shows a very marked increase in the quantity of country milk distributed in the metropolitan and Newcastle districts since 1936-37:—

TABLE 660.—Country Milk distributed in Sydney and Newcastle.  
1936-37 to 1946-47.

Year.	Metropolitan District.	Newcastle District.	Year.	Metropolitan District.	Newcastle District.
	gallons.	gallons.		gallons.	gallons.
1936-37 ...	21,249,500	1,616,300	1942-43 ...	30,838,700	2,309,300
1937-38 ...	22,694,800	1,747,300	1943-44 ...	32,952,700	2,499,200
1938-39 ...	24,666,700	1,790,500	1944-45 ...	34,606,400	2,670,900
1939-40 ...	24,648,100	1,784,700	1945-46 ...	42,489,200	3,431,800
1940-41 ...	25,824,700	1,870,600	1946-47 ...	46,393,400	3,913,600
1941-42 ...	28,011,000	2,168,000			

At various times during the years 1942 to 1947 milk for civilian requirements was distributed to households, hotels, retail vendors, etc. on a quota basis, varied at frequent intervals according to the quantity available for distribution. The supply of cream for civilian consumption was controlled under National Security Regulations, in the first instance from 10th May, 1943 until 11th November, 1946, and again from 1st September, 1947.

The supply and distribution of country milk in the metropolitan and Newcastle districts are supervised by the Milk Board, appointed by the Governor, and comprised of a chairman, a representative of dairymen, and a representative of the milk consumers. The Milk Board has power to fix prices and to regulate methods and conditions of supply and treatment of milk in producing districts and of distribution in distributing districts. The milk supplied for consumption or use in distributing districts (except milk produced and retailed directly by a dairyman on his own behalf) is

vested in the Board, and its supply, except to the Board, is prohibited. Milk and cream sold or to be sold for use in the manufacture of commodities within a distributing or producing district may, by proclamation, be vested in the Milk Board.

By arrangement, distributing companies organised for handling milk on a large scale act as agents for the Board in receiving the milk at country factories and transporting it to Sydney or Newcastle, where they purchase their supplies from the Board. The Board determines the quantity of milk to be supplied by the various producing areas and pays the producers at the minimum fixed prices.

The zoning system for retail delivery of milk introduced in Sydney in May, 1942 permitted one vendor only to deliver to households in each defined district, and continues in operation.

In March, 1932, minimum prices to be paid to dairymen for milk for the metropolitan district delivered at certain country factories were fixed by the Milk Board on a basis by which the cost, including treatment, handling at the factory, and freight, would be about 13d. per gallon on rail, Sydney. Prices for the Newcastle district were fixed as from 6th January, 1933. The prices were varied in March, 1938 and January and May, 1942, as shown in the next table. From April, 1945 until 1st November, 1947, wholesale and retail prices for whole milk in the metropolitan and Newcastle milk distributing districts were fixed by the Prices Commissioner. The lower distribution prices in the Newcastle district between April, 1945 and November, 1947 were made possible by the payment of a subsidy of 2d. per gallon to distributors by the Commonwealth Government.

The course of prices in these districts from March 1932 to October, 1947 is indicated below:—

TABLE 661.—Milk Prices—Sydney and Newcastle.

Date.	Price to Dairymen at Country Factory.  Minimum per gallon.	Wholesale Prices—Maximum per gallon.				Retail Prices—Maximum per quart.	
		To Vendors at Distributor's Depot.		At Shop Vendor's Premises.		Loose.	Bottled.
		Bulk.	Bottled.	Bulk.	Bottled.		
METROPOLITAN.							
1932—March ...	d. 10 to 11½	s. d. 1 5	s. d. ...	s. d. ...	s. d. ...	d. 7	d. ...
1938—March ...	12	1 5½	1 9½	1 10	2 2	7	8
1942—January ...	16	1 9½	2 1½	2 2	2 6	8	9
1942—May ...	16	1 9½	2 1½	2 0¾	2 4¾	7½	8½
1945—April* ...	16	1 8½	2 0½	2 1½	2 5½	7½	8½
NEWCASTLE.							
1933—January ...	11 to 11½	1 4	...	...	...	6½	...
1938—March ...	12	1 5	1 8	1 9	2 0	6¾	7½
1942—January ...	16	1 8	2 0	2 0	2 4	7½	8½
1942—May ...	16	1 8	2 0	1 11	2 3	7	8
1945—April* ...	16	1 6½	1 10½	1 11½	2 3½	7	8

\* Unchanged to November, 1947.

The maximum price for milk produced in metropolitan dairies and retailed by the producer was 8d. per quart from March, 1932 to May, 1942; then it was reduced to 7½d. per quart.



For special pasteurised milk (retailed in bottles) maximum wholesale prices in Sydney were fixed at 2s. 1½d. per gallon at distributors' depots and 2s. 6d. per gallon at vendors' premises, and the retail price at 9d. a quart from 1st August, 1939 to 30th April, 1942. A separate price for such milk did not operate again until April, 1945, when the Prices Commissioner fixed it at 2s. 2½d. a gallon wholesale to vendors and at 9d. per quart at retail.

Particulars regarding the subsidisation of whole milk for human consumption since 1944 in various parts of New South Wales, and the maximum prices fixed by the Prices Commissioner in areas outside the Milk Board's producing and distributing districts are given in the chapter "Dairying Industry" on page 552 *et seq.* of this volume.

### *Sugar and Jam.*

The quantity of refined sugar consumed annually in New South Wales including sugar used in the local manufacture of jam, biscuits and other food products is estimated at about 100 lb. per head. Sugar for household consumption was rationed from 31st August, 1942 until 30th June, 1947. The ration was 1 lb. per person per week, with occasional issues of extra sugar for jam making and fruit preserving.

The sugar consumed in Australia is produced in New South Wales and Queensland. In terms of an agreement (more fully described on page 473 of this volume) between the Governments of the Commonwealth and Queensland, the Queensland Government acquires the raw sugar manufactured from sugar-cane grown in Queensland and purchases the New South Wales production. The Queensland Sugar Board makes arrangements for the refining and distribution of sugar for use in Australia at prices fixed by the agreement and for the exportation of the surplus. The importation of foreign sugar is not permitted. The retail price of sugar in Sydney was 4d. per lb. from 31st January, 1933, until increased to 4½ per lb. on 17th October, 1947.

The quantity of sugar used in factories in New South Wales in 1938-39 and later years is shown below:—

TABLE 662.—Sugar used in Factories in New South Wales 1938-39 to 1945-46.

Factories.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Confectionery ... ..	13,004	14,657	14,735	15,041	15,845	18,533	18,788	19,816
Jam and Fruit Canning, ...	7,959	9,967	10,774	12,014	16,122	16,011	14,464	15,125
Pickles and Sauces ... ..	5,369	6,404	6,393	8,643	8,357	9,040	11,723	12,065
Aerated Waters, Cordials ...	6,922	7,483	8,373	8,770	8,650	8,411	8,486	8,428
Breweries ... ..	2,537	2,737	2,797	3,313	4,396	4,938	4,779	5,035
Condiments... ..	3,526	3,640	4,157	4,433	5,000	5,028	4,420	4,076
Biscuits ... ..	6,632	6,833	7,593	8,365	8,434	10,016	9,817	10,073
Other food factories ... ..								
Total ... ..	45,949	51,721	54,822	60,579	66,213	71,977	72,477	74,618

There are insufficient data for estimation of the annual *per capita* consumption of jam in New South Wales, but it probably differed little from that of about 11½ lb. before the war and about 14 lb. in 1946-47 as shown for Australia in Table 657.

*Tea and Coffee.*

Tea is very widely consumed throughout Australia; the average annual consumption has decreased as the result of rationing from about 7 lb. to less than 6½ lb. per head. Coffee consumption has increased from less than one-half pound per head before the war to more than one pound per capita.

Tea is not produced in Australia. Before the war about two-thirds of the supply came from the Netherlands East Indies and about one-fourth from Ceylon, but in the three years ended June, 1945 India and Ceylon supplied 61 and 39 per cent., respectively. A Board controlled supplies of tea under National Security Regulations as from March, 1942. A Commonwealth subsidy was paid to wholesale tea merchants from February, 1942 to avoid passing on to consumers the higher imported cost of tea. From July, 1943, under a general price stabilisation scheme, the subsidy was increased, and then varied from time to time, to keep the price of tea at approximately pre-war level until March, 1947, when the price was raised from 2s. 3d. to 2s. 9d. per lb.

The Netherlands East Indies supplied over 40 per cent. of Australia's coffee imports in the years 1936-37 to 1938-39. This source of supply fell into enemy hands and in the years 1942-43 to 1944-45 supplies, including coffee for Allied services based on Australia, were drawn mainly from British East Africa (43 per cent.) and the Belgian Congo, and were controlled and distributed under National Security Regulations.

*Vegetables and Fruit.*

The potato is the chief vegetable in the Australian diet but the quantity consumed varies greatly from time to time because of wide fluctuations in supplies and prices. Production in New South Wales is supplemented by imports from Tasmania and Victoria.

Onions are imported in large quantities from Victoria. Other vegetables are obtained chiefly from local sources and some by importation from other States. The Sydney supplies are marketed mainly at the City Council's market, where the growers sell their produce by private treaty or through agents.

A Committee, with the Potato Controller as its executive member, was appointed under National Security Regulations in April, 1942 to ensure a sufficient supply of potatoes in Australia for civilians and the Forces. Control of the production and marketing of potatoes continued during 1947-48. Growers were encouraged to increase production by contracts and guaranteed prices. Under the Commonwealth price stabilisation plan, described later, the retail price of potatoes in the capital cities of Australia was stabilised at 6d. for 5 lb. as from 24th July, 1943; the average price in Sydney at that time was 1s. 4½d. for 7 lb.

The fruit supply is derived mainly from local orchards, and from Victoria, Tasmania, and Queensland. The Tweed River and Coffs Harbour districts of New South Wales and the State of Queensland are the chief sources of the supply of bananas. Pineapples are brought from Queensland.

The fruits most generally consumed in New South Wales are apples, oranges, lemons, pears, peaches, apricots, plums, bananas, pineapples,

grapes, and passionfruit. Throughout the war period the greater proportion of dried and canned fruits was reserved for the Services or for export to Allied countries; that allocated for civilians in Australia was very restricted.

#### GAS AND ELECTRICITY.

An index of the quantity of gas and electricity consumed in the metropolitan area (excluding electricity used for railways and tramways), with the average annual consumption during the three years 1929 to 1931 as base equal to 100, is shown below:—

TABLE 663.—Gas and Electricity—Index of Consumption—Sydney.  
1929 to 1947.

Year.	Index Number.	Year.	Index Number.	Year.	Index Number.
1929	105	1939	131	1944	170
1932	96	1940	135	1945	172
1936	112	1941	148	1946	191
1937	119	1942	154	1947	204
1938	123	1943	167		

The consumption both of gas and electricity in Sydney has increased in each year since 1932 due to growth of population, extension of services, greater use of electrical equipment and appliances, and the growing demands of industrial and commercial users. The index of consumption of gas and electricity was about 55 per cent. higher in 1947 than in 1939 although the production of energy has been affected intermittently since 1945 by industrial disputes and by deficiencies in the quantity and the quality of coal available.

The supply of gas and electricity for cooking, heating and lighting is regulated under the Gas and Electricity Act, 1935. Standards are prescribed in respect of power, purity and pressure of gas, and there are standard prices for gas supplied to private consumers by meter. Standard maximum rates are fixed for dividends payable by the gas companies, viz., 6 per cent. on ordinary share capital, and 5½ per cent. on preference shares. The standard prices may be varied after inquiry as to what price would enable the company concerned to pay the standard rates of dividend. Such inquiries are conducted by boards which may be appointed from time to time, each consisting of a member nominated by the Minister for Local Government, one nominated by the company concerned, and a chairman chosen by agreement between the Minister and the company. Gas and electricity charges have been controlled under Prices Regulations since their promulgation.

The supply of electricity in New South Wales is undertaken by the State Government, the Sydney County Council, local councils, and a number of private companies. A Committee was appointed in 1935 to advise the Government on matters relating to the supply. On its recommendation the Electricity Authority of New South Wales was constituted in 1946 in terms of the Electricity Development Act to co-ordinate and control supply systems and to encourage the development of electricity services throughout the State, particularly in rural areas.

The Authority does not generate or distribute electricity, but is empowered to regulate the extension and inter-connection of supply systems

and the interchange of electricity between power stations. Subject to Ministerial approval, the Authority may grant subsidies or loans to assist councils or other electricity supply bodies to meet the cost of electricity works and may fix maximum prices for electricity supplied in bulk by way of interchange. The principal electricity supply bodies contribute towards expenses of administration, subsidies, etc.; the bodies concerned and the maximum annual charge which may be imposed on each are listed in the Act.

Further particulars relating to gas and electricity works are shown in the chapters "Local Government" and "Factories" of this volume (see pages 359, 362, 670 and 671).

The price of gas for domestic consumption in the greater part of the metropolitan area is charged under schedules of block rates in which the price decreases gradually as consumption increases except to a few large consumers to whom monthly accounts are rendered. Under the schedule applicable to all but a small proportion of the consumers, accounts are rendered quarterly; the highest rate is .428d. per gas unit (equivalent to 5s. 4.2d. per 1,000 cubic feet) for the first 3,000 gas units (approximately 20,000 cubic feet) consumed in the three months; and the lowest rate is .295d. per gas unit (about 3s. 8.25d. per 1,000 cubic feet) for the consumption in excess of 144,600 gas units (964,000 cubic feet). The rates were higher by 0.012d. per unit or approximately 2d. per 1,000 cubic feet between May, 1942 and July, 1944 to provide funds to recoup the company for expenditure on air raid precautions undertaken at the request of the Commonwealth Government. A gas unit means 3,412 British thermal units gross, and a British thermal unit is the quantity of heat required to raise 1 lb. of water 1 degree Fahrenheit.

The Sydney County Council supplies consumers in the greater part of the metropolitan area. Electricity for private dwellings was charged at separate rates for lighting and for power until May, 1925. Then a "single meter" system of charges was introduced, by which a certain rate (5d. per unit) is charged for primary units (either lighting or power) up to 2½ units per quarter per 100 square feet enclosed by the outer walls of the residence; and 1d. per unit for secondary units in excess of this limit. The rate for secondary units is  $\frac{7}{10}$ d. where an electric range has been installed for cooking.

Comparative statements regarding charges for gas and electricity for domestic consumption in Sydney were published in the 1939-40 issue of the Year Book at page 576.

#### THE CONTROL OF PRICES.

From the outbreak of war in September, 1939 to September, 1948, prices in Australia were controlled by the Commonwealth Government under defence powers. Control of prices was an important element of national policy directed to the maintenance of economic stability under the stress of war, and to ensure orderly transition from war-time to peace-time conditions. In September, 1948 administration of control of prices passed to State Governments. Provisions were made for Commonwealth and State collaboration throughout.

National Security Regulations, proclaimed in the first month of war under the National Security Act, provided for the appointment of a Commonwealth Prices Commissioner with very wide powers to control prices of goods and services declared for that purpose by the Minister for Trade

and Customs. The Central Prices Office at Canberra is a branch of the Department of Trade and Customs. The Prices Commissioner made Prices Orders under the regulations, and Deputy Prices Commissioners, nominated by the respective States, administered the regulations under the Commissioner's supervision. Throughout and since the war the administration exercised rigorous control of prices with the object of checking inflationary tendencies and of preventing profiteering without unduly discouraging essential production and trade.

Price control passed through five fairly distinct phases, the first of which was the short period of *Ministerial control* between the outbreak of war and the appointment of the Prices Commissioner. In this period proclamations fixed the maximum prices of specified commodities at those ruling on 31st August, 1939.

Late in September, 1939, general principles of control were established which provided for *automatic adjustment of prices to increases in costs*. Traders were allowed to add the same percentage margin of profit to costs as they did on 31st August, 1939; costs being defined as the actual into-store cost of the goods being sold, or in some circumstances, the average cost of all goods held at a certain date. The Commissioner might increase or decrease profit margins which he deemed inadequate or too high. Prices of many commodities excluded from operation of the general Orders (Nos. 2 and 100) were fixed specifically, but on the same principle; in a few exceptional cases, however, the formulae absorbed into prices increases in specified costs.

As a part of a general economic policy, interest, rents and wages were pegged early in 1942 and the method of price control was changed to limit profit margins to the *actual money margin as at 15th April, 1942*. This meant that increasing costs or enlarged turnover could no longer result in increasing the incomes of traders as was possible under the system previously operating.

The next phase of price control began with the adoption of the prices stabilisation policy. The prices actually being charged by traders on 12th April, 1943 were fixed as *ceiling prices* with a few exceptions, chief of which were perishable primary products for most of which ceiling prices already had been fixed. The ceiling prices applied in every stage of production, manufacture and distribution; concurrently provision was made for the granting of subsidies by the Government where needed to offset unavoidable rises in costs.

Prices stabilisation was designed to hold the general price level steady, but the price ceiling did not mean a rigid pegging of all individual prices. Some increases in prices were permissible; *e.g.*, traders charging lower prices for particular commodities might raise their prices toward the level of competitors' prices to cover increases in costs, and, on the other hand, higher prices for materials might be permitted where the resulting increase in costs could be absorbed in the later stage of manufacture or distribution. Subsidies were paid where import prices rose or the increase in prices of local products was arranged for reasons of national policy, or increased costs could not be absorbed by manufacturers or distributors. Eligibility for subsidy was considered by a Prices Stabilisation Committee, and its recommendations, if approved by the Minister, were subject to the final approval of the Commonwealth Treasurer. Traders might ascertain before

ordering whether goods proposed to be imported would be regarded as essential, and were paid subsidy covering increases in landed costs upon documentary proof of arrival of the goods.

At this time also Orders were made fixing *specific maximum prices* for hundreds of grocery lines, for many fruits and vegetables, for woollen piece goods, cotton yarns, woollen goods, standard cloths and for meats, thus informing consumers of the legal ceilings and at the same time facilitating enforcement of the regulations. Traders in groceries, some fruits and vegetables, liquor and furniture were obliged to exhibit lists of maximum prices or to mark the goods with the actual selling prices.

Uncontrollable factors (*e.g.*, delayed adjustments, seasonal movements) caused a further rise in the index of retail prices during the first quarter of operation of the prices stabilisation plan. This entailed an automatic increase in the basic wage, with a resultant increase in labour costs. To meet this contingency, the Government undertook to refund to employers the amounts paid as basic wage increases.

At the same time the price of tea was reduced by 1s. 2d. per lb. to its pre-war level, and for potatoes (at that time 7 lb. for 16½d. in Sydney) the standard maximum price was established at 5 lb. for 6d. (capital city basis). Importers and growers were subsidised correspondingly. Sales tax on clothing and textiles was reduced from 12½ per cent. to 7½ per cent., to take effect as existing stocks were cleared. Clothing was then about 75 per cent. dearer than before the war.

Control of prices was extended to embrace charges for services including those rendered by State governments, semi-governmental and local government authorities for transport, electricity, gas, etc., as well as private service charges—*e.g.*, taxi fares, amusements, school fees, etc.

The upward trend of import prices, which became more marked after the war, made the system of holding retail prices steady by the payment of subsidies a very significant factor in the control of prices. A subsidy on raw wool for processing tended to keep down prices of locally manufactured woollen goods. Increases in coal prices were avoided by subsidy payments until July, 1947 (see page 688). Subsidy payments to dairy farmers enabled prices of milk, butter and other dairy products to be kept stable, or nearly so. In respect of wheat and important base metals, producers were required to absorb increased costs of production in higher prices realised for the proportion of production exported, and local prices were not allowed to rise.

As shown later (see page 737), the retail price index relating to basic necessities remained steady throughout the five years 1943 to 1946.

The prices stabilisation scheme came to an end in 1947, partly through change of policy, partly from a wide variety of other causes.

Regulations pegging wages were modified in 1947, and a shorter working week was introduced in New South Wales in July, 1947. These occasioned increased costs that could not be met by subsidy.

Charges for public transport, gas and electricity were increased and many increases in commodity prices were permitted also, and sharp increases occurred in import prices and in prices of exportable primary products. A significant upward trend in retail prices developed during the latter half of 1947 and continued into 1948 partly as a result of progress toward total withdrawal of stabilisation subsidies, modification of home consumption price schemes, and the effects of increases in money wages.

The Commonwealth Government's authority over prices continued into 1948 by virtue of Defence (Transitional Provisions) Acts of 1946 and 1947 which prolonged operation of the relevant National Security Regulations.

A bill for alteration of the Constitution to empower the Commonwealth Government to make laws with respect to "rents and prices (including charges)" was passed by the Federal Parliament in December, 1947 and was rejected by the electors of all States at a referendum on 29th May, 1948. Arrangements were thereupon made for State Governments to assume responsibility for price control as from September, 1948.

#### WHOLESALE PRICES.

Index numbers of the wholesale prices in Sydney which were published in issues of the Year Book up to 1940-41 have been discontinued pending the compilation of a new series to illustrate the trend of a wider range of goods.

Average wholesale prices of various primary products, groceries, building materials, etc. for the years 1939 and 1942 to 1947 are shown in the following statement. The quotations represent the mean of the monthly prices in Sydney and are stated in Australian currency.

TABLE 664.—Wholesale Prices (Sydney) 1939 to 1947.  
(Average for Year.)

Commodity.	1939.	1942.	1943.	1945.	1946.	1947.
Wheat, milling ... bush.	s. d. 2 6-8	s. d. 3 11-3	s. d. 3 11-3	s. d. 3 11-3	s. d. 3 11-3	s. d. 3 11-6
Flour (including tax) ... ton	246 11	248 0	248 0	248 0	248 6	260 11
Chaff, wheaten ... "	82 0	169 10	155 6	202 8	176 9	203 7-5
Potatoes (local) ... "	277 4	321 11	201 0	157 6*	157 6*	178 11-3*
Sugar 1A ... "	664 0	664 0	664 0	664 0	664 0	664 0
Tobacco, dark plng ... lb.	13 1	17 0	18 10	18 10	18 11	19 7
Tea, packets ... "	2 1-8	3 1-4	2 5-9	1 11-3	1 11-3	2 4
Soap, household ... 44 lb.	22 1	23 1	23 9	23 9	23 8	24 9
Jam ... 18 lb.	10 5	12 0-3	13 2-5	13 6	13 6	14 9
Kerosene, case ... 8½ gal.	13 0	12 3-5†	.....	.....	.....	.....
Kerosene, drum ... 4 gal.	.....	8 6	8 6	8 1-5	7 8-5	7 3-8
Wool, greasy ¶ ... lb.	0 10-3	1 1-1	1 3-1	1 3-1	1 3-1	1 11-3
Leather, sole ... "	2 0-4	2 3-8	2 3-8	2 3-8	2 3-8	2 3-8
Woolpacks, 11½ lb. ... each	3 10-8	5 5-8	6 7-8	6 7-2	7 7-2	9 7-2
Iron—Pig, f.o.r., f.a.s., Newcastle	85 0	90 6	110 0	110 0	110 0	128 3
Plate, girder (9 to 18 x ½ in.)	421 3	434 7	483 9	483 9	482 5	502 3
Corr. galv. Orb, 26g. ... ton	570 0	636 6	707 5	655 0	655 0	713 8
Copper, sheet (6 x 3 x 24g.)	1 3-2	1 8-1	1 8-9	1 6-6	1 6-6	1 9-2
Hardwood, local (3 x 2) to 21 ft.	27 6	42 11	52 2	48 0	48 0	49 9
Pine—Local (4½ x 1) ... "	61 6	76 7	82 1	73 6	73 6	73 6
N.Z. (4½ x 1) ... "	44 0	60 0	64 8	57 6	57 6	68 10
Oregon (2 x 2 to 12 x 6 to 30 ft.)	37 5	84 10	94 6	88 0	90 11	113 7
Bricks, common ... 1,000	62 7	79 11	89 4	89 3	90 0	100 9
Beef—Ox Fores ... lb.	0 3-2	0 4-1	0 3-8†	.....	.....	.....
Ox Hinds ... "	0 5-5	0 7-5	0 7-8†	.....	.....	.....
Ox and Heifer ... "	.....	.....	0 5-5‡	0 5-7	0 5-6	0 6-4
Mutton, wether ... "	0 3-8	0 4-1	0 4-2	0 5-1	0 5-3	0 6-5
Lamb ... "	0 6-3	0 6-9	0 7-4	0 8-2	0 9-2	0 10-6
Butter ... "	1 5	1 5-8	1 5-9	1 5-9	1 5-9	1 6-1
Eggs, new laid, 1st quality doz.	1 4-4	1 7-8	1 10-2	1 10-3	1 10	2 0

\* Maximum price, No. 1 grade. † 6 gal. drum, January to July. ‡ January to May. § June to December. ¶ Season ended 30th June of year shown.

The average price of wheat shown in the table is that fixed by the Australian Wheat Board for wheat for flour for local consumption; the price was constant at 3s. 11½d. per bushel from August, 1940 until late in December, 1947. This, however, was not the effective price paid for wheat used in flour by Australian consumers, because, as part of the scheme to stabilise the price of wheat, a tax was levied on flour (see page 459), making

the price of wheat used for flour in these years equivalent to approximately 4s. 11d. per bushel. The prices shown in Table 664 for flour are inclusive of flour tax.

The wholesale price of sugar is fixed by the Sugar Agreement (see page 723). Wholesale prices of tea and potatoes were reduced in July, 1943 under the Commonwealth price stabilisation plan. Kerosene was distributed by the Pool consisting of companies distributing petroleum products (formed in August, 1942 and ended in March, 1947) under National Security Regulations; the varying kinds of containers used in the period precluded strictly comparable quotations.

In the years 1940 to 1946 the average prices of wool as stated are the agreed prices at which the Australian clip was acquired by the United Kingdom Government (in 1945-46, on behalf of Joint Organisation); in other years they are those realised at auction. Prices stated for butter refer to the supply for local consumption which usually was dearer than butter for export overseas. The basis of quotations for beef was changed in June, 1943.

*Index Numbers of Wholesale Prices—Australia and Other Countries.*

Even under normal conditions it is difficult to make valid international comparisons as to price levels and changes in price levels. Under the conditions prevailing during and since the war, marked in various countries by price, commodity, currency and exchange control in varying degree, bases of comparison became most uncertain. The following statement shows index numbers of wholesale prices as compiled officially in the respective countries for the years 1936-37 to 1946-47.

The index numbers for Australia, compiled by the Commonwealth Statistician, relate to basic materials and foodstuffs, weighted on average annual consumption during the years 1928-29 to 1934-35.

TABLE 665.—Wholesale Price Index Numbers; Australia and Other Countries. Base: Average 3 years ended June, 1939=1,000.

Year ended June.	Australia.*	New Zealand.	Canada.	United Kingdom.	United States.
	C'wealth Bureau of Census and Statistics.	Census and Statistics Office.	Dominion Bureau of Statistics.	Board of Trade.	Bureau of Labour Statistics.
1937	984	960	1,014	998	1,039
1938	1,005	1,019	1,051	1,044	1,013
1939	1,011	1,021	935	958	948
1940	1,047	1,102	1,007	1,171	961
1941	1,140	1,240	1,072	1,436	993
1942	1,242	1,334	1,184	1,531	1,163
1943	1,373	1,448	1,228	1,576	1,247
1944	1,396	1,517	1,286	1,603	1,271
1945	1,405	1,540	1,294	1,638	1,289
1946	1,412	1,567	1,321	1,673	1,325
1947	1,429	1,546	1,460	1,776	1,707

\* See text above table.

RETAIL PRICES OF FOOD.

The average retail prices in Sydney of various commodities, as shown in this chapter, are based on the prices quoted by retail shops in the metropolitan district in returns collected by the Commonwealth Statistician.



The following statement shows annual average prices in the years 1914, 1918, 1939 and 1942 to 1947, inclusive; the figures represent the means of the monthly prices during each year:—

TABLE 666.—Retail Prices of Food, Sydney, 1914 to 1947.  
(Average for Year.)

Commodity and Unit of Quantity.			1914.	1918.	1939.	1942.	1943.	1944.	1945.	1946.	1947.
			s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Bread	...	2 lb. loaf	0 3-5	0 4-0	0 6-0	0 6-0	0 5-8	0 5-8	0 5-8	0 5-8	0 5-9
Flour	...	2 lb.	0 2-8	0 3-5	0 4-9	0 5-0	0 5-0	0 5-0	0 5-0	0 5-1	0 5-2
Tea	...	lb.	1 4-7	1 7-5	2 3-3	3 4-2	2 11-2	2 3-0	2 3-0	2 3-0	2 8-0
Sugar	...	...	0 2-8	0 3-5	0 4-0	0 4-0	0 4-0	0 4-0	0 4-0	0 4-0	0 4-0
Jam, plum	...	1½ lb.	0 7-0	0 8-7	0 9-6	0 11-7	1 0-6	1 1-6	1 1-8	1 2-2	1 2-9
Rice	...	lb.	0 3-1	0 3-4	0 3-4	0 3-6	0 3-5	0 3-5	0 3-5	0 3-5	0 3-5
Oats, flaked	...	...	0 2-9	0 3-3	0 3-3	0 3-6	0 3-5	0 3-7	0 3-8	0 3-9	0 4-2
Potatoes	...	7 lb.	0 7-2	0 9-5	1 5-8	1 5-5	1 0-5	0 8-8	0 8-4	0 8-4	0 9-4
Kerosene	...	quart	0 3-4	0 6-6	0 4-9	0 5-8	0 6-1	0 6-3	0 6-0	0 5-8	0 5-8
Milk, fresh	...	...	0 5-2	0 5-9	0 7-1	0 7-6	0 7-5	0 7-5	0 7-5	0 7-5	0 7-6
Butter	...	lb.	1 2-5	1 6-9	1 7-0	1 7-9	1 8-0	1 8-0	1 8-0	1 8-0	1 8-3
Cheese	...	lb.	0 10-9	1 1-3	1 2-6	1 4-8	1 5-2	1 5-1	1 5-4	1 5-6	1 5-6
Eggs, fresh	...	doz.	1 6-3	1 10-2	1 7-0	1 10-9	2 1-4	2 2-3	2 2-3	2 1-6	2 4-2
Bacon, middle cut	†	lb.	1 1-4	1 4-8	1 4-3	1 7-2	1 9-0	1 10-4	1 10-0	1 10-0	1 10-3
Beef, sirloin	...	...	0 6-7	0 10-3	0 10-4	1 0-3	1 0-8	1 0-3	1 0-7	1 0-8	1 2-0
Steak, rump	...	...	0 5-5	0 9-1	0 7-8	0 8-6	0 9-1	0 8-7	0 8-2	0 8-1	0 8-4
Beef, corned round	...	...	0 9-2	1 2-4	1 2-9	1 8-1	1 9-9	1 8-8	1 8-8	1 9-3	1 11-8
Mutton, leg	...	...	0 5-3	0 9-2	0 8-2	0 9-5	0 10-0	0 10-0	0 10-4	0 10-7	0 11-6
Chops, loin	...	...	0 5-0	0 7-8	0 7-2	0 7-5	0 7-8	0 8-4	0 8-6	0 9-0	0 10-5
Chops, leg	...	...	0 5-6	0 8-2	0 8-0	0 9-1	0 9-5	0 10-1	0 10-7	0 10-6	1 1-2
Pork, leg	...	...	0 6-4	0 9-6	0 8-9	0 9-8	0 10-8	0 10-9	0 11-5	0 11-5	1 2-0
Pork, chops	...	...	0 5-8	0 9-0	0 8-0	0 9-0	0 9-9	0 10-2	0 11-2	0 11-6	1 1-9
„	...	...	0 9-6	1 0-7	1 1-1	1 3-7	1 4-0	1 4-6	1 4-6	1 4-1	1 3-1
„	...	...	0 11-0	1 2-1	1 5-1	1 4-4	1 6-2	1 6-2	1 6-2	1 6-1	1 6-1

\* Nominal; rice not generally available to civilians.

† Rashers in 1939 and later years.

Prices of bread and flour were kept virtually stable from 1939 to 1947 as part of the wheat price stabilisation scheme. There were sharp increases in the price of tea in 1941 and 1942, but these were offset by subsidy from 1943 to 1946, and in 1947 a moderate increase made tea about 5d. per lb. dearer than in 1939. There was no change in the price of sugar from 1939 to 1947, but during that period tinned jam became progressively dearer and (for plum jam) the average price was about 55 per cent. higher in 1947 than before the war. Rice was not available to Australian civilians generally from 1942 onward.

Potatoes were very dear (more than 2½d. per lb) in 1939, much cheaper in 1940 and 1941, and nearly as dear in 1942 as in 1939. Under the price stabilisation scheme they were maintained at the low price of 6d. for 5 lb. from 1943 to July, 1947, when the price became 10½d. for 7 lb.

After increases of about ½d. per quart and about 1d. per lb. in 1942, milk and butter were practically unchanged in price until late in 1947, but cheese was about 3d. per lb. dearer in 1947 than in 1939, whilst eggs became nearly 9½d. per dozen dearer.

Meat prices rose steadily throughout the war years. Very little pork was available to civilians in those years. On the average meat was about 28½ per cent. dearer in 1946 than in 1939 and there were again fairly pronounced rises in meat prices in 1947. These increases were in part the aftermath of severe drought, livestock being in short supply owing to re-stocking.

Details regarding monthly variations in average retail prices of food to 30th June, 1942 were published in earlier editions of the Year Book (see 1940-41, page 539). Reference to the preceding table shows that there

were few subsequent changes in the prices of bread, flour, sugar, tea, butter and milk. The average prices of sugar (4d. per lb.), milk (7½d. per quart), and butter (1s. 8d. per lb.) in June, 1942 were unchanged during the next five years, but milk rose ½d. per quart and butter 3½d. per lb. in November and December, 1947, respectively. There was an increase of ½d. per loaf in the price of bread in November, 1947, but otherwise no change over the five and a half years. The average price per lb. of tea had risen to 3s. 5d. by November, 1942. It was then stabilised by subsidy at 2s. 3d. per lb. from August, 1943 until March, 1947, and at 2s. 9d. per lb. from March to December, 1947.

The monthly average prices of cheese, plum jam, flaked oats, potatoes and eggs in Sydney in each month of the years 1942 to 1947 are shown in the following table:—

TABLE 667.—Average Retail Prices, Sydney—Certain Groceries—Monthly.

Month.	Cheese, Mild. lb.	Jam, Plum. 1½ lb.	Flaked Oats. 1 lb.	Pota- toes. 7 lb.	Eggs, Hen. doz.	Month.	Cheese, Mild. lb.	Jam, Plum. 1½ lb.	Flaked Oats. 1 lb.	Pota- toes. 7 lb.	Eggs, Hen. doz.
1942—Jan. ...	d. 15·3	d. 11·0	d. 3·8	d. 14·7	d. 17·0	1945—Jan. ...	d. 17·1	d. 13·6	d. 3·8	d. 8·7	d. 28·3
Feb. ...	15·3	11·3	3·8	16·5	19·8	Feb. ...	17·1	13·6	3·8	8·7	28·3
Mar. ...	16·9	11·4	3·7	17·0	21·2	Mar. ...	17·1	13·7	3·8	8·4	28·3
Apr. ...	17·2	11·5	3·6	17·8	27·6	Apr. ...	17·2	13·7	3·8	8·4	28·3
May ...	17·2	11·5	3·5	17·8	27·6	May ...	17·2	13·7	3·8	8·4	28·2
June ...	17·0	11·6	3·5	18·5	27·6	June ...	17·4	13·7	3·8	8·4	28·2
July ...	17·0	11·9	3·6	17·3	27·5	July ...	17·7	13·8	3·8	8·4	28·2
Aug. ...	17·0	12·0	3·6	19·4	21·0	Aug. ...	17·7	13·8	3·8	8·4	28·3
Sept. ...	17·2	12·0	3·6	16·6	20·9	Sept. ...	17·1	13·8	3·8	8·4	22·6
Oct. ...	17·2	12·0	3·6	16·6	21·0	Oct. ...	17·7	13·8	3·8	8·4	22·4
Nov. ...	17·2	12·2	3·6	21·0	21·0	Nov. ...	17·7	14·0	3·8	8·4	22·4
Dec. ...	17·2	12·2	3·6	16·9	22·8	Dec. ...	17·4	14·0	3·8	8·4	22·4
1943—Jan. ...	17·4	12·2	3·6	10·6	23·9	1946—Jan. ...	17·7	14·1	3·8	8·4	24·6
Feb. ...	17·4	12·4	3·6	10·9	27·3	Feb. ...	17·7	14·1	3·8	8·4	28·2
Mar. ...	17·4	12·4	3·6	17·0	27·4	Mar. ...	17·7	14·1	3·8	8·4	28·2
Apr. ...	17·4	12·6	3·5	16·5	27·4	Apr. ...	17·7	14·2	3·9	8·4	28·2
May ...	17·4	12·6	3·5	16·3	27·4	May ...	17·7	14·2	3·9	8·4	28·2
June ...	17·4	12·6	3·4	16·3	27·4	June ...	17·7	14·2	3·9	8·4	28·2
July ...	17·4	12·6	3·4	16·4	27·6	July ...	17·7	14·2	3·9	8·4	28·2
Aug. ...	17·5	12·6	3·4	8·6	27·6	Aug. ...	17·4	14·2	3·9	8·4	24·6
Sept. ...	17·2	12·6	3·5	8·4	22·2	Sept. ...	17·4	14·3	3·9	8·4	22·2
Oct. ...	16·7	12·6	3·5	10·5	22·2	Oct. ...	17·4	14·3	3·9	8·4	22·2
Nov. ...	16·8	12·6	3·5	10·0	22·1	Nov. ...	17·4	14·3	3·9	8·4	22·2
Dec. ...	17·1	13·3	3·5	8·8	22·2	Dec. ...	17·5	14·3	3·9	8·4	22·2
1944—Jan. ...	17·1	13·5	3·6	9·0	27·9	1947—Jan. ...	17·5	14·4	3·9	8·4	24·5
Feb. ...	17·1	13·5	3·6	8·7	28·2	Feb. ...	17·5	14·4	3·9	8·4	28·2
Mar. ...	17·1	13·5	3·6	9·0	28·2	Mar. ...	17·5	14·4	3·9	8·4	28·6
Apr. ...	17·1	13·5	3·7	8·9	28·2	Apr. ...	17·5	14·5	4·0	8·4	31·4
May ...	17·1	13·6	3·7	8·9	28·2	May ...	17·5	14·9	4·1	8·4	31·4
June ...	17·1	13·6	3·7	8·8	28·2	June ...	17·6	15·2	4·2	8·4	31·4
July ...	17·1	13·6	3·7	8·7	28·2	July ...	17·5	15·2	4·3	10·2	31·4
Aug. ...	17·1	13·6	3·7	8·7	28·2	Aug. ...	17·5	15·2	4·3	10·5	28·4
Sept. ...	17·1	13·6	3·7	8·7	22·2	Sept. ...	17·5	15·2	4·3	10·5	24·4
Oct. ...	17·1	13·6	3·7	8·7	22·3	Oct. ...	17·5	15·2	4·3	10·5	24·4
Nov. ...	17·1	13·6	3·7	8·7	22·3	Nov. ...	17·5	15·2	4·3	10·5	26·4
Dec. ...	17·1	13·6	3·6	8·7	23·0	Dec. ...	18·2	15·3	4·3	10·5	28·4

The price of cheese rose by about 2d. per lb. in 1942 and then was virtually stabilised until December, 1947 when the average was 1d. per lb. dearer than at the end of 1942. Tinned jam and loose flaked oats steadily increased in price throughout the five years ended 1947. Prices of eggs, fixed by the Controller, showed sharp seasonal changes about the same general level from 1943 to 1946 and about a higher level in 1947; in June and December, 1947 eggs were about 4d. and 5½d. per dozen dearer than in the corresponding months of 1942.

The course of average retail prices of meat in Sydney is illustrated in the following statement of selected cuts during the years 1942 to 1947:—

TABLE 668.—Average Retail Prices of Meat—Sydney—Monthly.

Month.	1942.	1943.	1944.	1945.	1946.	1947.	1942.	1943.	1944.	1945.	1946.	1947.
Beef, Ribs, bone in, per lb.							Beef, Rump Steak, per lb.					
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
January ...	8-4	9-2	8-5	8-8	8-1	8-6	18-6	21-6	22-0	20-1	21-0	23-0
February ...	8-3	9-1	8-5	8-8	8-1	10-0	19-1	21-3	20-7	20-1	21-0	25-0
March ...	8-8	9-2	8-4	8-2	8-0	9-6	19-4	21-8	20-7	21-6	21-0	25-0
April ...	8-5	9-1	8-6	8-2	8-0	8-1	19-4	22-0	20-7	21-0	21-0	23-6
May ...	8-6	9-2	8-6	8-2	8-0	8-1	19-4	22-0	20-7	21-0	21-0	23-6
June ...	8-5	9-2	8-6	8-2	8-0	8-1	19-5	22-0	20-7	21-0	21-0	23-5
July ...	8-6	9-2	8-8	8-1	8-0	8-1	19-9	22-0	21-0	21-0	21-0	23-5
August ...	9-0	9-2	8-8	8-2	8-0	8-1	21-1	22-0	20-7	21-0	21-0	23-5
September ...	9-	9-2	8-8	8-1	8-0	8-1	21-3	22-0	21-0	21-0	21-0	23-5
October ...	8-8	9-2	8-8	8-0	8-0	8-1	21-4	22-0	21-0	21-0	21-0	24-0
November ...	8-8	8-5	8-8	8-0	8-6	8-1	20-8	22-0	20-2	21-0	23-0	24-0
December ...	8-8	8-5	8-8	8-1	8-6	8-1	21-1	22-0	20-1	21-0	23-0	24-0
Mutton, Leg, per lb.							Mutton, Loin Chops, per lb.					
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
January ...	7-0	7-7	7-8	8-2	8-4	9-6	8-7	10-4	10-2	10-2	11-0	12-4
February ...	7-0	7-8	7-8	8-2	8-4	10-8	8-8	10-5	10-2	10-2	11-1	14-2
March ...	7-1	7-9	7-9	8-4	9-2	10-6	9-0	10-6	10-4	12-0	11-4	14-4
April ...	7-1	7-9	7-9	8-4	9-2	10-6	9-2	10-6	10-4	12-0	11-5	13-8
May ...	7-2	7-8	7-9	8-4	9-4	10-6	9-4	10-6	10-4	12-0	11-5	13-8
June ...	7-6	7-9	9-2	8-7	9-4	10-6	9-5	10-6	11-8	12-0	11-5	14-2
July ...	8-1	7-9	9-0	8-9	9-0	10-6	10-6	11-4	11-8	12-0	11-4	14-2
August ...	8-0	7-9	9-0	8-9	8-6	10-6	10-8	11-4	11-7	12-0	11-4	14-2
September ...	7-6	7-9	9-0	8-9	8-6	10-6	10-4	11-4	11-4	12-0	11-4	14-2
October ...	7-7	7-9	8-7	8-6	8-6	10-4	10-4	10-8	11-2	11-2	11-5	14-0
November ...	7-7	7-7	8-6	8-6	9-4	10-4	10-4	10-4	10-4	11-1	12-0	14-0
December ...	7-7	7-8	8-2	8-4	9-4	10-4	10-4	10-4	10-4	11-1	12-0	14-0

Throughout the period covered by the table, increases in prices of mutton were proportionately greater than were those of beef. Beef, both in the joint and as rump steak, was dearer in 1943 than in any other of the years 1942 to 1946, but at the end of 1947 ribs of beef were cheaper by about  $\frac{3}{4}$ d. and rump steak dearer by nearly 8d. per lb. than in December, 1942. Legs of mutton were nearly 2 $\frac{1}{2}$ d. and loin chops were more than 3 $\frac{1}{2}$ d. per lb. dearer in December, 1947 than in the last month of 1942. Demands for sheep to restore flocks depleted by drought, coupled with high prices for wool, were factors affecting mutton prices in 1946 and 1947.

#### HOUSE RENTS.

At the census of June, 1933, the number of private dwellings occupied by tenants in New South Wales were 270,740 or 47 per cent. of the total. The average weekly rental (unfurnished) was 18s. 10d., *viz.*, private houses 18s. 1d. and flats and tenements 23s. 9d. The number of such dwellings in the metropolitan area was 160,260, and the average rentals 21s. 11d.—private houses 21s. 1d., flats and tenements 25s. 4d. Further details regarding rents in the metropolitan and country districts at that Census date were published on page 603 of the 1933-34 issue of this Year Book. Data from the Census of June, 1947 are not yet available.

#### *Average Rents of Houses, Sydney.*

A comparative statement of average weekly rents in Sydney from 1865 to 1920 is published in the Statistical Register of New South Wales, 1919-20, and for later years to 1936 in the Statistical Register, 1935-36.

Information regarding rents of unfurnished houses containing four and five rooms is collected by the Commonwealth Statistician from a representative number of house agents in the capital cities and a number of towns

in each State for use in the compilation of price index numbers. The agents' returns, supplied quarterly, show the rentals of a substantial number of houses, selected by field officers of the Commonwealth Bureau of Census and Statistics as being representative and providing a sample suitable to measure quarterly the ratio of changes in weekly rentals of houses.

The relative increases in average rentals so ascertained are shown below. The averages are essentially indices measuring changes for a constant standard; they do not indicate the average amount of rental actually paid for *all* rented houses, and still less do they indicate the rental at which vacant or new houses may be rented.

TABLE 669.—Rents, per week, Unfurnished Houses, Sydney, 1929 to 1941.

Year.	Four Rooms.		Five Rooms.		Weighted Average, 4 & 5 Rooms.
	Wooden.	Brick.	Wooden.	Brick.	
	s. d.	s. d.	s. d.	s. d.	s. d.
1929 ... ..	20 0	22 8	24 7	29 3	25 7
1932 ... ..	16 2	18 0	18 6	21 11	19 8
1933 ... ..	15 8	17 6	18 4	21 1	19 0
1936 * ... ..	15 10	19 3	19 6	22 5	20 4
1937 ... ..	17 0	21 0	19 7	24 0	21 8
1938 ... ..	18 3	21 11	20 5	24 9	22 6
1939 ... ..	19 1	22 7	21 2	25 5	23 3
1940 ... ..	19 4	22 8	21 3	25 7	23 5
1941 ... ..	19 4	22 9	21 4	25 7	23 5
1942 to 1945 ... ..	19 5	22 8	21 5	25 7	23 5
1946 ... ..	19 6	22 8	21 6	25 6	23 5
1947 ... ..	19 7	22 9	21 5	25 6	23 5

Note.—Kitchen is included as a room. \* Basis amended slightly.

There has been little rise in these house rentals since 1939 owing to the operation of the Fair Rents Regulations described below.

#### CONTROL OF RENTS.

##### *State Measures.*

Leases of dwellings in New South Wales are subject to the Landlord and Tenant Act, 1899 and its amendments. Since 1931 the right to eject tenants from dwellings leased at rentals not exceeding £3 per week has been restricted. By law there was prescribed a general reduction of 22½ per cent. in rentals from October, 1931 as a measure to combat the economic depression then prevailing, and rental of premises under lease entered into prior to 30th June, 1930 continue to be subject to this reduction.

Provision for war-time control of rents in New South Wales was made by the State Fair Rents Act, 1939 (described on page 541 of the 1940-41 edition of the Year Book), but from 28th November, 1941 provisions of the Act in regard to the determination of fair rents were virtually superseded by National Security (Landlord and Tenant) Regulations, described below.

##### *Commonwealth Measures.*

National Security (Fair Rents) Regulations for the control of rents in Australia were issued by the Commonwealth Government on 29th September, 1939. In view of the enactment (and proclamation on 1st December, 1939) of the Fair Rents Act of the State, referred to above, these regulations were not brought into operation in New South Wales, and after

November, 1941, they were gradually superseded by the National Security (Landlord and Tenant) Regulations and were repealed in January, 1943.

The Landlord and Tenant Regulations were issued on 28th November, 1941 for the control of rents and to give tenants security of tenure. Particulars regarding the tenancy provisions of the regulations are given in the chapter "Social Condition" of this volume. The regulations applied in New South Wales as from date of issue and after termination of the National Security Act at the end of 1946 were continued in force by Commonwealth and State legislation. They cover all classes of rented premises (and land and appurtenances leased therewith) other than grazing areas, farms, orchards or market gardens, premises leased for sale of spirituous or fermented liquors, premises ordinarily leased for holiday purposes only, or classes of premises excluded by Ministerial Order. Parts of premises not in themselves complete residences, but leased for residence, shortly described as "shared accommodation", were brought specifically under the regulations from 2nd July, 1945.

At that date a Commonwealth Rent Controller was appointed with power to determine the fair rent of shared accommodation. Rent controllers appointed in each State act for him in enforcing the regulations, and the controller co-ordinates their activities to ensure, as far as possible, the uniform application of policy. All cases for prosecution are referred for his direction.

Unless otherwise determined under the regulations, the rent of rented premises (including goods—*e.g.*, furniture—leased therewith) may not exceed the rent payable at the prescribed date (31st August, 1939 in New South Wales), or of premises not then in existence or not then leased, the rent payable on 1st March, 1945.

Fair Rents Boards were constituted by the Minister comprising a magistrate and two other persons until December, 1946, when the powers and functions of a board were made exercisable by a Police, Stipendiary or Special Magistrate. Fair rents (other than of shared accommodation) were determined by the boards until 30th December, 1946. Then to ensure uniformity of policy and practice, the function was transferred to the Rent Controller, and his determinations were made subject to appeal to Fair Rents Boards.

Any landlord may at any time apply for determination of the fair rent if he is dissatisfied with the rent he is receiving. A determination may be sought by a tenant provided he has paid all rent due to a date within seven days in the case of shared accommodation, and twenty-eight days in the case of other premises, of the date of application.

Matters to be considered in determining fair rent are: the capital value of the premises at prescribed date or, if not then in existence, at date of completion; annual costs such as rates, insurance premiums and repairs, maintenance and renewals; annual depreciation and time premises may be vacant; rents of comparable premises in the locality; rate of interest charged upon overdrafts by the Commonwealth Bank; any services provided by lessor or lessee; any obligation on part of lessee to effect improvements, etc. at his own expense; the justice and merits of the case and conduct of the parties, and any hardship which would be caused by increase or reduction of rent, including loss which might be imposed on lessor in regard to his liability under mortgage or contract of sale in respect of the premises, or under hire purchase agreement or contract of sale regarding goods leased with the premises.

Determinations operate from date of application (in respect of shared accommodation from date of inspection) or a specified later date. An application for variation may not be made during the period specified in the determination, or if there is no specified period, the twelve months after its date, except on grounds of injustice occasioned by error or omission, of increased outgoings and losses resulting from the lessee's use of the premises since fair rent was determined, of substantial alterations to the premises, goods leased therewith or services supplied by the lessor, or, material decrease in the value of the premises, goods or services.

Fair Rents Boards were constituted under the Landlord and Tenant Regulations at each of 302 Courts of Petty Sessions in New South Wales on 4th December, 1941. The boards had jurisdiction in respect of dwelling-houses, including flats and the premises of lodging and boarding-houses, which were let on 31st August, 1939 at rentals not exceeding £4 4s. per week, and those of which the fair rental at that date would not have exceeded £4 4s. From 11th March, 1942 rent fixing powers were extended to shops and garages, *viz.*, shops and premises partly shop and partly other prescribed premises leased to one tenant, at rent not exceeding £20 a week, and those of which the fair rental would not have exceeded £20 a week at that date, and garages, irrespective of rent paid. The rent limit in respect of dwelling-houses, etc. remained at £4 4s. a week until 17th March, 1943 when it was raised to £10 a week. From 15th November, 1943, the rent limit was removed in relation to shops and premises partly shops and partly other premises, and from 9th June, 1944, the powers of the Fair Rents Boards in New South Wales were extended to all prescribed premises irrespective of rent (licensed premises and premises leased for holiday purposes only being excepted).

Information regarding the number of determinations of fair rents in New South Wales under the Landlord and Tenant Regulations to December, 1947, as recorded by the Commonwealth Directorate of Housing, is shown below:—

TABLE 670.—Fair Rents Determinations—New South Wales.

Particulars.	Shared Accommodation.			Other Premises.		
	Oct.—Dec., 1945.	Year, 1946.	Year, 1947.	May—Dec., 1945.	Year, 1947.	Year, 1947.
Rent—Decreased ...	548	5,683	4,353	646	950	1,885
Increased ...	185	1,908	1,412	599	1,195	2,552
Not changed ...	219	1,802	2,022	86	206	1,120
Applications heard ...	952	9,393	7,787	1,331	2,351	5,557

## RETAIL PRICE INDEX NUMBERS.

Retail price index numbers for Sydney and other Australian cities and towns are compiled by the Commonwealth Statistician. The earliest index related to the prices of food and groceries and rents of all houses, with the year 1911 as the base. It was known as the "All Houses" or "A" series index, and has been superseded by the "All Items" or "C" series index.

The latter series originated in the findings of the Royal Commission, appointed by the Commonwealth Government in 1919, which investigated the cost of living in each capital city of Australia for a family consisting of man, wife, and three children under 14 years of age in November of

each year from 1914 to 1920 at a standard which it determined. Following the recommendations of the Commission the Commonwealth Statistician extended the scope of collection of retail prices to cover all the main groups of household expenditure on the basis of a regimen similar to that adopted by the Commission, in order to compile the "All Items" index numbers. The groups of household expenditure covered by the series are food and groceries, rent of four- and five-roomed houses, clothing, and miscellaneous items, including fuel and light. Full particulars of the index are contained in the "Labour Report" published annually by the Commonwealth Statistician.

The "All Items" retail price index numbers for Sydney as compiled by the Commonwealth Statistician are shown below. The index numbers from 1914 to 1922 inclusive are available for the month of November only. In 1923 and later years the index has been compiled for each quarter, and the annual figures in the table represent the mean of the four quarters. Separate particulars are stated for the various groups of expenditure. The base of each group of household expenditure is the weighted average for that group in the six capital cities of Australia during the quinquennium 1923-1927, taken as 1000.

TABLE 671.—Retail Price Index Numbers—"All Items"—Sydney,  
1914 to 1947.

(Base of each group : Weighted average, six capital cities of Australia, 1923-27=1000.)

Period.	Food and Groceries.	Housing (4 and 5 Rooms).	Food, Groceries and Housing Combined.	Clothing.	Mis- cellaneous.	Total Household Expendi- ture.
1914, November	688	758	680	755	766	712
1915 "	844	780	825	805	798	816
1916 "	833	791	818	903	808	836
1917 "	877	797	848	1009	889	892
1918 "	877	832	861	1102	988	938
1919 "	1073	866	1000	1237	1059	1065
1920 "	1225	980	1138	1323	1209	1193
1921 "	964	1000	977	1255	1009	1046
1922 "	982	1048	1006	1051	1034	1021
Years—						
1923-27 ...	1012	1111	1047	950	1021	1020
1928 ...	1021	1143	1064	978	1048	1042
1929 ...	1090	1162	1115	983	1046	1073
1930 ...	984	1197	1059	931	1040	1026
1931 ...	876	1026	929	835	1013	922
1932 ...	852	894	867	769	996	867
1933 ...	800	864	822	742	988	832
1934 ...	825	869	840	746	975	842
1935 ...	840	891	858	746	976	852
1936 ...	848	930	878	778	949	866
1937 ...	868	965	904	818	949	889
1938 ...	904	1004	941	833	936	913
1939 ...	986	1035	972	843	940	936
1940 ...	952	1042	985	950	984	974
1941 ...	962	1043	992	1119	1051	1028
1942 ...	1040	1043	1039	1302	1105	1107
1943 ...	1042	1042	1040	1450	1166	1151
1944 ...	1025	1043	1030	1440	1171	1144
1945 ...	1035	1043	1036	1425	1163	1142
1946 ...	1039	1043	1038	1516	1170	1165
1947 ...	1110	1044	1082	1572	1216	1212

The index number of total household expenditure in Sydney fell by 22½ per cent. between 1929 and 1933, and then rose slowly and in 1939 was still 13 per cent. below the level of 1929. During the next two and a half years prices in all groups, particularly prices of clothing, became dearer, and the index number in the second quarter of 1943 was about 9 per cent. above that for the year 1929 and over 16 per cent. above its level in the immediate pre-war quarter. The prices stabilisation plan and related measures (see page 726) applied as from April, 1943 until the war ended. The subsequent relaxation of war-time controls and a strong upward trend of import prices led to rising retail prices, and by the close of 1947 the "All Items" index number had risen to 33.1 per cent. above the pre-war level. On the average, throughout 1947 food was 18.6 per cent. dearer, rent was less than 1 per cent. higher, but clothing was 86.5 per cent. dearer, and miscellaneous items were 29.4 per cent. dearer than during 1939.

The "C" series retail price index numbers for each quarter since March, 1939 are shown below; the base of each group is the same as the base of the index numbers in Table 671.

TABLE 672.—Retail Price Index Numbers—"All Items"—Sydney.

Quarterly, 1939 to 1947.

(Base of each group : Weighted average, six capital cities of Australia, 1923-27=1000.)

Quarter ended—	Food and Groceries.	Housing (4 & 5 rooms).	Food, Groceries & Housing Combined.	Clothing	Miscellaneous.	Total Household Expenditure.	
						Index No.	Increase from Sept. Qr., 1939.
							per cent.
1939—March ...	944	1027	974	835	937	934	...
June ...	930	1033	968	841	939	932	...
September ...	930	1039	970	841	939	933	...
December ...	940	1040	977	854	943	943	1.1
1940—March ...	933	1041	973	884	949	946	1.4
June ...	957	1041	988	923	985	970	4.0
September ...	945	1042	980	948	996	973	4.3
December ...	974	1042	998	1046	1004	1008	8.0
1941—March ...	982	1043	1003	1058	1030	1018	9.1
June ...	949	1043	984	1109	1039	1019	9.2
September ...	947	1043	983	1129	1062	1027	10.1
December ...	969	1044	996	1179	1072	1048	12.3
1942—March ...	1005	1045	1018	1211	1085	1070	14.7
June ...	1034	1043	1035	1279	1089	1096	17.5
September ...	1061	1042	1051	1337	1105	1122	20.3
December ...	1060	1042	1051	1382	1140	1138	22.0
1943—March ...	1050	1042	1045	1408	1145	1141	22.3
June ...	1065	1042	1054	1479	1162	1165	24.9
September ...	1039	1042	1038	1463	1176	1154	23.7
December ...	1015	1042	1023	1449	1179	1143	22.5
1944—March ...	1019	1043	1026	1443	1176	1143	22.5
June ...	1025	1043	1030	1437	1172	1143	22.5
September ...	1035	1043	1036	1437	1167	1146	22.8
December ...	1022	1043	1027	1441	1169	1142	22.4
1945—March ...	1027	1043	1031	1420	1163	1138	22.0
June ...	1040	1043	1039	1410	1163	1141	22.3
September ...	1042	1043	1040	1412	1163	1142	22.4
December ...	1029	1043	1032	1459	1163	1147	22.9
1946—March ...	1035	1043	1035	1463	1167	1151	23.4
June ...	1042	1043	1040	1510	1171	1165	24.9
September ...	1032	1043	1034	1537	1168	1167	25.1
December ...	1047	1043	1043	1555	1175	1177	26.2
1947—March ...	1097	1044	1073	1532	1186	1192	27.8
June ...	1096	1044	1073	1540	1187	1194	28.0
September ...	1109	1044	1081	1579	1244	1218	30.5
December ...	1139	1045	1099	1639	1245	1242	33.1



When the "All Items" index number for Sydney reached the war-time peak in June quarter, 1943 it was 24.9 per cent. higher than in September, quarter, 1939, with increases in the group indexes for food and groceries of 14.5 per cent., for clothing of 75.9 per cent., and for miscellaneous items of 23.7 per cent.; that for average rent of occupied houses (4 and 5 rooms) was barely changed.

The upward trend of prices was arrested during 1943 by the introduction of the price ceiling in April, reduction of sales tax on clothing, reduction by subsidy in prices of tea and potatoes in July, and by other measures to stabilise prices. The "C" series index number had returned by December quarter to the March quarter level, and remained stable during the next two years, after which prices tended to rise, at first very gradually and then more rapidly in the latter half of 1947.

Between March quarter, 1946 and December quarter, 1947, the "All Items" index number rose by 8.3 per cent. The increases in group indexes since before the war were then food and groceries, 22.5 per cent.; rents, 0.6 per cent.; clothing, 94 per cent.; and miscellaneous items, 32.6 per cent.

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## EMPLOYMENT.

### GOVERNMENTAL ADMINISTRATIVE AUTHORITIES.

Matters regarding employment and industrial conditions are administered by the Commonwealth and the State.

The New South Wales Department of Labour and Industry and Social Welfare deals with the registration of trade and industrial unions, administrative work in connection with industrial arbitration and conciliation within the jurisdiction of the State, workers' compensation, the inspection of factories and shops, and other matters of industrial welfare, including apprenticeship training and welfare of youths. Information regarding departmental activities, new industrial legislation, industrial awards and agreements, etc. is given in the New South Wales Industrial Gazette issued monthly by the Department.

The Commonwealth Department of Labour and National Service was established in 1940 to organise the labour resources of Australia for war and to prepare for post-war rehabilitation and development. Throughout the war, with the co-operation of State authorities, it dealt with such matters as employment, industrial relations, training and welfare, manpower registration and the preparation and initiation of reconstruction measures. In January, 1942 a Director-General of Manpower was appointed to administer manpower, and in December, 1942 responsibility for post-war planning was transferred to the newly-created Department of Post-war Reconstruction. Further particulars of the activities of the Department of Labour and National Service and the Director-General of Manpower are given on page 545 of the 1940-41 edition of the Year Book and on page 744 of this volume.

### RE-ESTABLISHMENT AND EMPLOYMENT ACT, 1945.

The Re-establishment and Employment Act, 1945, proclaimed on 27th August, 1945, provided for the re-establishment in civil life of ex-service personnel and of certain other qualified persons (*e.g.*, civilians with "war" service as defined under the Act), preference in employment for seven years of ex-service men and women (and of other persons registered by the Preference Board), and the creation of the Commonwealth Employment Service.

#### *Re-establishment.*

Discharged members of the forces were entitled, on application within one month of date of discharge, to reinstatement in positions occupied by them prior to enlistment, without loss of benefits or privileges which would have accrued had they not been engaged on war service. Employers were obliged to re-employ them, terminating if necessary the employment of persons engaged in their places.

Apprenticeships or trainee apprenticeships interrupted by war service might be revived by the appropriate apprenticeship authority upon application within two months of date of discharge, with the original employer where practicable, or with another employer, by transfer of the apprenticeship contract. Terms and conditions of apprenticeship might be modified and an allowance might be awarded to increase earnings to what they would have been had the apprenticeship not been suspended. In respect of discharged service personnel the Act authorised the amendment by regulation of the conditions of entry into employment or the requirements relating to the following of any profession, occupation, business, trade, or industry.

There are special provisions for the training and rehabilitation of disabled ex-service personnel, of whom a register is maintained. Employers of specified classes may be required to employ a specific number or proportion of these persons.

#### *Financial Assistance for Re-establishment.*

Upon honourable discharge, members of the forces were given re-establishment leave for a period of thirty days (fifteen days if war service was less than six months), after which, if occupational re-establishment was sought and not secured, a re-employment allowance was payable for a period not exceeding three, or in special circumstances, six months. The allowance, reduced by the amount of any pension, allowance, or earnings of the recipient or his dependants, is at the rate of £2 10s. per week for a man and for a woman capable of wholly or substantially maintaining herself by her own efforts (other women proportionately less), supplemented by £1 2s. per week for one or more adult dependants, and 9s. per week for each of the first three dependent children.

Within five years of the termination of the war, eligible persons (mainly members of the forces and widows of deceased members) with not less than six months' war service, or who have been prejudiced by war service, and who, immediately prior to the war, were engaged in an occupation, business, or practice as a principal, an active partner, a share farmer, or as a contract worker, may receive a loan to enable their re-establishment satisfactorily in civil life. The amount of the loan (which is advanced only for a specific purpose and is expected to be repaid within a reasonable period) may not exceed £250, except that in respect of certain specified occupations, businesses and practices, the maximum is £500, and in respect of an agricultural occupation is £1,000.

Business and agricultural re-establishment allowances, as distinct from loans, may be paid to assist the re-establishment of eligible persons while awaiting returns from their business. These allowances are payable for a period not exceeding six months (twelve months in the case of agricultural pursuits) after the commencement of the business, occupation or practice. The rate of allowance is determined according to the circumstances of each particular case.

Assisted by funds provided by and under agreement with the Commonwealth, a State may acquire, develop and improve land on which discharged members of the forces may be settled in terms of that agreement, as more fully described on page 598 of this volume.

Upon discharge, members of the forces may receive tools of trade, plant and equipment (other than clothing) to a value of £10, and an interest-free loan up to £40 to obtain further such items. Permanently totally incapacitated and blinded ex-servicemen and widows with dependent children and whose husbands died whilst on service or within five years after discharge, may receive a grant by way of gift of up to £75 for the purchase of essential household furniture.

#### *Reconstruction Training.*

A Reconstruction Training Scheme is provided for the vocational training (including training for a professional or agricultural occupation) of prescribed classes of discharged members of the forces and other specified persons. In administering the scheme, the Minister has the advice and assistance of a Central Reconstruction Training Committee, Regional Training Committees, and Industrial and Professional Committees. The scheme is designed mainly to promote the rehabilitation of service personnel who commenced war service before attaining the age of 21 years, and these comprise by far the larger proportion of those eligible for its benefits.

The facilities of the States are used wherever practicable, but in certain cases other arrangements have been made. Fees for the courses of trainees and essential books (to a value of £10 per annum) and instruments and equipment (to a value of £20 per annum) are provided by the Commonwealth. In addition, trainees are eligible, whilst undergoing training, to living allowances (and, where appropriate, living-away-from-home allowances), the rates current from 1st July, 1947 ranging from £3 10s. per week for a male trainee without dependants and £2 15s. per week for a female trainee living at home without dependants to a maximum of £5 10s. per week for a male or female trainee with two or more dependants.

The Reconstruction Training Scheme is described more fully in the chapter "Education" of this volume.

#### *Demobilisation.*

A White Paper outlining the Government's scheme for demobilisation of members of the Defence Forces was presented to Parliament on 29th August, 1945. An account of the scheme and particulars regarding the progress of demobilisation are given on page 45 of this Year Book.

#### *Commonwealth Employment Service.*

Prior to the establishment of the Commonwealth organisation, a system of Labour Exchanges throughout New South Wales was operated by the State Department of Labour and Industry.

The Commonwealth Employment Service was set up in 1946 and functions under the Re-establishment and Employment Act, 1945 and the Social Services Legislation Declaratory Act, 1947. It was created to provide "services and facilities in relation to employment for the benefit of persons seeking to change employment or to engage labour, and to provide facilities to assist in bringing about and maintaining a high and stable level of employment throughout the Commonwealth". The service absorbed the organisation of the Director-General of Manpower and was given specific functions in relation to the re-establishment of ex-service personnel and war workers, the maintenance of a nation-wide labour exchange organisation, and the provision of occupational advice and vocational guidance to facilitate the employment of persons in positions appropriate to their qualifications and experience. It is also the agency which

receives claims for unemployment and sickness benefits and for re-employment allowances (for discharged members of the forces) and makes payments in appropriate cases.

The service is controlled by the Director of Employment within the Division of Employment of the Department of Labour and National Service. It is organised on a decentralised basis, with the Central Office in Sydney and subsidiary offices in each of the other capital cities, District Employment Offices in suburban and provincial centres (57 in New South Wales), and agents responsible to the District Offices in a large number of smaller country centres.

Particulars of the major activities of the Commonwealth Employment Service in New South Wales from their commencement in May, 1946 up to 31st December, 1947 are given in the following statement. Registered applicants for employment are either persons already in employment seeking to change their jobs or unemployed persons seeking employment. The number of vacancies notified should not be construed as a measure of the demand for labour; many employers do not notify vacancies, believing it unlikely that labour of the classes required may be secured through the Employment Offices.

TABLE 673.—Activities of Commonwealth Employment Service in New South Wales, May, 1946 to December, 1947.

Month.	Applicants for Employment.			Ex-service- men Placed in Employ- ment Upon Discharge.	Number of persons given advice or Information.	Number of Vacancies.	
	Newly Registered.	Referred to Employers.	Placed in Employ- ment.			Notified during month.	Unfilled at end of month.
1946—May ...	14,827	12,187	7,054	3,498	14,901	3,460	21,480
June ...	11,148	9,576	5,564	2,507	16,770	10,600	23,915
July ...	13,005	11,500	6,723	2,975	21,586	10,637	25,695
August ...	13,129	11,782	7,070	3,133	19,845	13,077	27,696
September ...	13,100	11,350	7,113	3,314	24,302	12,099	27,759
October ...	13,059	12,411	7,597	3,459	26,890	11,582	27,644
November ...	13,846	12,407	7,182	3,216	27,224	11,380	26,260
December ...	11,349	8,458	5,613	2,021	23,672	7,346	22,573
1947—January ...	17,616	14,180	8,133	3,506	30,449	12,683	24,420
February ...	14,973	13,800	8,771	3,874	28,215	15,972	27,985
March ...	14,465	14,422	8,872	4,070	25,713	14,705	28,472
April ...	12,697	12,922	7,611	3,557	16,890	11,219	26,493
May ...	13,911	13,767	8,555	3,684	17,368	14,195	25,112
June ...	13,496	13,323	8,159	3,407	17,289	14,007	26,666
July ...	13,051	12,957	8,232	3,594	17,494	14,491	27,194
August ...	12,062	12,301	7,551	3,103	15,814	12,762	28,491
September ...	12,497	12,868	8,236	3,017	16,551	14,816	30,292
October ...	13,727	12,963	8,446	3,334	15,770	16,090	33,006
November ...	12,822	12,400	8,083	*	15,219	13,976	33,699
December ...	10,232	9,540	6,747	*	12,378	9,489	31,925

\* Not available.

#### WAR-TIME CONTROL OF EMPLOYMENT.

During the first two years of war control of manpower was mainly confined to the activities of a Manpower Committee, representative of the Defence and Supply Departments, which restricted enlistment in the forces in accordance with a List of Reserved Occupations as revised from time to time.

To overcome a growing shortage of skilled workers for the production of munitions and essential supplies, existing customs and conditions of employment in certain trades were relaxed temporarily. The terms of dilution were arranged and supervised by a central dilution committee and a local committee in each State representing employers and employees in

each trade or group of trades. Selected persons were given courses of intensive training and suitable employees were advanced to tradesman status with the approval of the appropriate local dilution committee.

The conditions of employment of workers producing munitions and supplies for war purposes were prescribed by National Security Regulations. To check "poaching" of employees generally, the offer or acceptance of wages higher than those prescribed by regulation was prohibited and, in certain occupations, the transfer of an employee required the consent of the previous employer.

The control of manpower began to take positive form upon the establishment of the Department of Labour and National Service in November, 1940 (see page 740) when the Commonwealth Government undertook the organisation for war of the nation's labour force as a whole. The Department of Labour and National Service became responsible for, *inter alia*, recruitment and training of workers and the supply of labour for essential industries. In 1941 a Manpower Priorities Board was established to review the manpower position and advise on policy, and this Board became the nucleus of the new Directorate of Manpower.

Manpower was brought under systematic control by the National Security (Manpower) Regulations of January and March, 1942, which aimed to ensure that labour resources should be "organised and applied in the best possible way to meet the requirements of the Defence Forces and the needs of industry in the production of munitions and the maintenance of supplies and services essential to the life of the community". A new and decentralised register of manpower resources was compiled from the compulsory registration of all persons who attained the age of 16 years on or before 15th March, 1942. Executive powers were given the Director-General of Manpower, who had a Deputy Director-General, and a network of National Services Offices in each State; the Department of War Organisation of Industry co-operated in classifying industries as essential or otherwise and in rationalising industrial processes to economise national resources.

The list of reserved occupations was revised drastically and the National Services Offices determined exemption from and deferment of enlistment, and sought to provide sufficient manpower for the services. Employers other than those specifically exempted, or engaged in munitions production, or carrying on a protected undertaking, were permitted to engage labour only through these offices, which also became the sole agency for the re-direction of labour displaced by rationing, rationalisation of industry, etc.

Progressively, industries were "protected" to ensure stability and balance of the war-time economy. In protected undertakings, employers could not dismiss employees or employ them in any other undertaking, nor could employees change their employment or enlist in the forces, without permission from manpower authorities.

Unemployed persons were obliged to register, to accept employment as directed, and not to change this employment without permission. Obstacles preventing the employment of women in munitions and aircraft factories in work not requiring the skill of tradesmen were removed. Prisoners-of-war were employed on non-military works, and unnaturalised aliens were called up and employed in the labour corps.

Throughout 1942 the mobilisation of manpower was intensified; there was drastic reduction of civilian production and rationalisation of industry.

replacement of men by women, and thorough combing of protected undertakings. In August, 1942, it was provided that *all* labour—male and female (with a few exceptions)—would be recruited through National Services Offices; in the same month, women in essential industries were reserved and the enlistment of females from certain occupations was restricted.

On a report by the War Commitments Committee established to advise as to sources of manpower for the forces and war production, the regulations were amended in January, 1943. The manpower authorities were empowered to direct persons resident in Australia to engage in employment under any employer and to perform specified work. Employment could not be changed or terminated without permission.

A change in the war situation later in 1943 made the expansion of essential production (particularly of foodstuffs) a paramount need, and on the recommendation of the War Commitments Committee the manpower policy was modified accordingly. From October, 1943 until general demobilisation began, manpower for essential production was diverted from munitions and aircraft industries, from less essential production, and from the forces by a system of special releases in addition to routine discharges.

General demobilisation of service personnel began in October, 1945, according to the plan described on page 46 of this volume. During the closing months of 1945 control over manpower was eased progressively; civilian registration ceased, the system of "protected" undertakings and labour was discontinued, and restrictions upon the employment and dismissal of workers were relaxed materially. Control over employment of males ended as from 1st March, 1946, and of females from 1st May, 1946.

Further particulars of war-time controls affecting employment are given in the chapters "Industrial Arbitration" and "Wages" of this volume.

#### *Women's Employment Board.*

The Women's Employment Board was constituted under National Security (Employment of Women) Regulations and the Women's Employment Act, 1942 to regulate the employment of women during the war on work usually performed by men. The Board's permission was necessary to employ women on work within the scope of the regulations. It fixed hours, wages and other conditions of employment in respect of each application, and was required to assess rates of wages by reference to efficiency and the special factors likely to affect the production of the women's work in relation to that of men, and provided that the wages fixed for any adult woman might be not less than 60 per cent. nor more than 100 per cent. of men's wages for similar work.

The Board was dissolved in October, 1944 and the control of awards made and sustained by it devolved upon a permanent Judge of the Commonwealth Arbitration Court. In September, 1945 certain industries were declared "vital" by regulation, and in these industries female rates of wages may be not less than 75 per cent. of the minimum rates for males working under the same award, not taking into account margins for skill.

#### *Allied Works Council.*

Employment on works required for war purposes by the Allied Forces in Australia was under the direction and control of the Director-General of Allied Works appointed by the Commonwealth and men engaged on

the works were organised as the Civil Constructional Corps. Men between ages 16 and 45 years could be directed to serve in the Corps and volunteers were accepted. The Director-General determined conditions of employment, having regard to terms of industrial awards and agreements applicable to employees engaged on similar work. The Corps was disbanded by December, 1945, but in that month there were 2,700 other employees in New South Wales engaged on works for the Council.

### *Zoning of Sheep Shearing.*

The supply of labour for the shearing of sheep was regulated by a system of zoning in terms of National Security Regulations dated 7th May, 1942. Owners of more than 1,000 sheep might not engage labour for shearing unless the shearing was done within the period prescribed for the zone in which the sheep were depastured. The system ceased to operate after the shearing of the 1945-46 clip.

### EMPLOYMENT STATISTICS.

Statistical data of employment in New South Wales are not available in respect of periods prior to the census of 1891. Between 1891 and the census of June, 1933, data of employment were obtained only at the decennial censuses.

From July, 1933 to June, 1941 monthly estimates were prepared of the number of wage and salary earners (including rural workers and female private domestics) in employment. These estimates were based on information supplied by employers in remitting the Wages Tax levied by the State Government, supplemented by returns of persons in governmental employment and annual factory and farmers' returns collected under the Census Act, 1901.

A new series of monthly estimates of employment commenced in July, 1941 following the introduction of a Pay-roll Tax by the Commonwealth Government and relates to wage and salary earners in private or governmental employment (exclusive of rural workers and female private domestics). These estimates are based upon the record of employment shown on pay-roll tax returns furnished by employers. (For details of this tax and the classes of employers not taxable, see page 253 of this volume.) This information is supplemented by monthly collections of governmental employment and annual factory returns collected under the Census Act, 1901.

Data of the number of rural workers and female private domestics in employment and of the number of employers, workers on own account, and unpaid helpers are available only on the occasion of a census or quasi-census (and, in respect of persons occupied in rural industry, from the annual rural returns collected under the Census Act, 1901). The quasi-censuses held since the Census of June, 1933 were the National Register in July, 1939 (which covered males aged 18 to 64 years), the Supplementary Civilian Register in June, 1943 (which covered civilians aged 14 years and over), and the Occupation Survey of 1st June, 1945 (also covering civilians aged 14 years and over). The last full census was held on 30th June, 1947; the final results of this enumeration are not yet available.

Records of net enlistments in the Defence Forces are obtained monthly from data supplied by the Service Departments.



## OCCUPIED PERSONS.

The following table shows the number of occupied persons in New South Wales recorded at the census of June, 1933 and the subsequent census and quasi-census enumerations listed above. The table affords particulars for each sex and distinguished those occupied (a) in the defence forces (net enlistments), (b) as employers or workers on own account in business or on farms, and (c) as wage and salary earners, whether as fully-employed or casual part-time, intermittent, or seasonal workers. Unemployed persons and government relief workers are excluded (see page 757 of this volume for available data of unemployment).

Unpaid helpers (male and female) in non-rural industries have been included with the wage and salary earners group. Unpaid male helpers in rural industry have been included with employers and workers on own account, on the assumption that they work as unofficial partners or as learners with farm owners. Most of the unpaid female helpers on farms are engaged mainly in home duties, and these, with all other women occupied in unpaid home duties, have been excluded altogether from the category of occupied persons.

TABLE 674.—Occupied Persons, New South Wales, 1933 to 1947.

Year and Month.	Employers and Workers on own account.			Wage and Salary Earners.				Total Occupied Civilians.	Defence Forces.	Total Occupied Persons, \$
	Rural Indus-try.	Other Indus-tries.	Total.	Rural Indus-try.	Females in Private Domestic Service.	Other.	Total.			
Males (Thousands).										
1933—June ...	93·3	93·9	187·2	65·6	.....	380·6	446·2	633·4	2·9	636·3
1939—July ...	95·0	121·2	216·2	66·3	.....	529·9	596·2	812·4	4·9	817·3
1943—June ...	82·6	58·4	141·0	38·6	.....	525·1	563·7	704·7	257·4	962·1
1945—June*	90·2	74·0	164·2	42·8	.....	534·1	576·9	741·1	229·1	970·2
1947—June† ...	‡	‡	196·2	‡	.....	‡	717·4	913·6	17·6	931·2
Females (Thousands).										
1933—June ...	4·1	20·5	24·6	1·5	38·9	125·8	166·2	190·8	.....	190·8
1939—July ...	4·1	24·3	28·4	1·1	51·7	163·0	220·8	249·2	.....	249·2
1943—June ...	3·7	12·5	16·2	0·0	13·3	254·4	276·7	292·9	15·9	308·8
1945—June*	5·1	16·2	21·3	7·3	19·0	247·7	274·0	295·3	16·6	311·9
1947—June† ...	‡	‡	26·9	‡	‡	‡	247·8	274·7	0·2	274·9
Persons (Thousands).										
1933—June ...	97·4	114·4	211·8	67·1	38·9	506·4	612·4	824·2	2·9	827·1
1939—July ...	99·1	145·5	244·6	67·4	51·7	697·9	817·0	1,061·6	4·9	1,066·5
1943—June ...	86·3	70·9	157·2	47·6	13·3	779·5	840·4	997·6	273·3	1,270·9
1945—June*	95·3	90·2	185·5	50·1	19·0	781·8	850·9	1,036·4	245·7	1,282·1
1947—June† ...	‡	‡	223·1	‡	‡	‡	965·2	1,188·3	17·8	1,206·1

\* 1st June, 1945 (Occupation Survey).

† Preliminary.

‡ Not available.

§ For unemployed persons see Table 681.

The recovery from the economic depression of the early 'thirties and the general industrial expansion that preceded the outbreak of war in September, 1939 are reflected in the trend in the number of occupied persons in New South Wales between June, 1933 and July, 1939. The number occupied increased by 239,000 (181,000 males and 58,000 females), the sources of the increase being a rise of about 98,000 in the number available and offering for gainful occupation, and a fall of about 141,000 in the number of unemployed persons. During the period, 33,000 more employers and workers on own account (29,000 males and 4,000 females) commenced business and a further 206,000 wage and salary earners (of whom 152,000 were males) entered employment.

The period July, 1939 to June, 1943 covers the intensive mobilisation of manpower resources for war purposes. Although the number of occupied persons increased by 205,000, because of the absorption of virtually all unemployed persons and those who normally would not be seeking occupation, the expansion of the defence forces by 269,000 caused a decline of 64,000 in the number of occupied civilians (a net gain of 44,000 females only partly offsetting the loss of 108,000 males). Significant features of this period were the direction of the civilian labour force into essential production, with the munitions programme reaching its peak in June, 1943, the drastic reduction in the number of workers in rural industry, and substantial decline in the number of females in private domestic service and of employers and workers on own account, the latter partly as a result of enlistment in the forces and partly of change to wage and salary earning.

Between June, 1943 and June, 1945 manpower policy was adapted to changes in the war situation. Employment on munitions was reduced, and special releases were made from the defence forces and other protected undertakings to expand employment in other vital fields, especially rural industry. During this period, the number of occupied civilians increased by 39,000 (36,500 males and 2,500 females), including an increase of 12,000 males in rural industry.

The movements during the period June, 1945 to June, 1947 reflect the general demobilisation of the forces, the removal of manpower controls, and the trend towards a peace-time economy. The number of occupied persons declined by 76,000 (39,000 males and 37,000 females), factors being the entry of ex-service personnel into full-time training, with others resting, prior to resuming or commencing civil employment, and the retirement from the forces or civil employment of persons who normally do not seek gainful occupation. There were 228,000 persons (212,000 males and 16,000 females) discharged from the armed forces, and about 38,000 (32,000 males and 6,000 females) entered civilian employment as employers or workers on own account and 114,000 (the entry of 141,000 males offsetting the retirement of 27,000 females) as wage and salary earners. Although the number of occupied civilians rose by 152,000 (a gain of 173,000 males and a loss of 21,000 females) during the period, the increase in rural industry was small.

#### WAGE AND SALARY EARNERS IN EMPLOYMENT.

Estimates of the total number of wage and salary earners (including rural workers and female domestics in private households) in employment in New South Wales are given in respect of each month from July, 1933 to June, 1941 on page 549 of the 1940-41 edition of the Year Book. These estimates are subdivided to show the extent of employment by private as distinct from governmental employers.

The following table shows the estimated number of wage and salary earners in employment in New South Wales in certain months between June, 1933 and December, 1947. The estimates exclude workers in rural industry, female domestics in private households, government relief workers, and persons on the paid strength of the defence forces, and they distinguish between persons in the employ of governmental authorities and of private employers. The table traces the trends in that sector of wage and salary earning employment which can be estimated monthly.

TABLE 675.—Wage and Salary Earners in Civil Employment,  
New South Wales, 1933 to 1947.(Excluding rural workers, female domestics in private households,  
and persons on paid strength of defence forces).

Year and Month.	Males.			Females.			Persons.		
	Governmental.*	Private.	Total.	Governmental.*	Private.	Total.	Governmental.*	Private.	Total.
Thousands.									
1933—June ...	103·2	277·4	380·6	16·8	109·0	125·8	120·0	386·4	506·4
1939—July ...	136·5	393·4	529·9	19·4	148·6	168·0	155·9	542·0	697·9
1941—July ...	141·5	406·2	547·7	21·7	196·6	218·3	163·2	602·8	766·0
1943—July ...	156·9	365·2	522·1	46·1	207·7	253·8	203·0	572·9	775·9
1944—July ...	152·2	372·0	524·2	45·6	205·4	251·0	197·8	577·4	775·2
1945—July ...	156·7	384·5	541·2	43·4	203·3	246·7	200·1	587·8	787·9
1946—July ...	169·8	455·6	625·4	32·8	210·2	243·0	202·6	665·8	868·4
Dec. ...	172·7	474·7	647·4	31·2	219·5	250·7	203·9	694·2	898·1
1947—Jan. ...	173·5	479·8	653·3	31·8	216·8	248·6	205·3	696·6	901·9
Feb. ...	174·9	479·7	654·6	31·9	217·1	249·0	206·8	696·8	903·6
Mar. ...	175·5	486·2	661·7	32·0	219·6	251·6	207·5	705·8	913·3
April ...	176·4	488·4	664·8	32·0	219·1	251·1	208·4	707·5	915·9
May ...	177·4	490·6	668·0	32·1	219·4	251·5	209·5	710·0	919·5
June ...	178·2	493·6	671·8	32·3	219·8	252·1	210·5	713·4	923·9
July ...	179·0	497·7	676·7	32·3	220·6	252·9	211·3	718·3	929·6
Aug. ...	179·6	499·8	679·4	32·6	222·8	255·4	212·2	722·6	934·8
Sept. ...	180·4	503·0	683·4	32·6	224·1	256·7	213·0	727·1	940·1
Oct. ...	180·6	505·8	686·4	32·7	225·6	258·3	213·3	731·4	944·7
Nov. ...	180·6	507·3	687·9	32·6	228·1	260·7	213·2	735·4	948·6
Dec. ...	181·7	506·9	688·6	32·6	228·2	260·8	214·3	735·1	949·4

\* Employees of Commonwealth, State and Local Governmental authorities and of Allied Governments.

Movements in the number of wage and salary earners in civil employment (excluding rural workers and female private domestics) conformed in general to the movements in the number of occupied persons described below Table 674.

The number of males in civil employment rose by 48,000 between July, 1939 and December, 1941. With the outbreak of war in the Pacific, manpower resources were very intensively organised and men were called rapidly to the services. As a result male employment fell by 23,000 between December, 1941 and June, 1942 and by a further 13,000 to its lowest ebb (521,000) in October, 1943. During the next year there was a gradual upward trend; male employment increased by 4,000 to October, 1944 and by a further 17,000 to August, 1945. In the closing months of 1945 this trend was interrupted by marked contraction in war production, transitional difficulties in resuming peace-time activities, the retirement of many who worked temporarily during the war and did not normally seek employment, and by industrial disputes. General demobilisation of the armed forces proceeded rapidly in 1946 and there were gains in male civil employment of 117,000 in 1946 and 41,000 in 1947. By December, 1947 the number of male wage and salary earners in employment (excluding rural workers) had risen to 689,000; 159,000 (30 per cent.) more than in July, 1939.

The mobilisation of labour resources increased the number of females in civil employment by 50,000 between July, 1939 and July, 1941 and, despite a heavy intake into the services, by a further 41,000 to the peak (259,000) in December, 1943. During the next two years the number of females declined slowly but steadily by 21,000, because of gradual

reduction in munitions production and discontinuance of many other war-time activities, the return of men to civil life, and the retirement of women temporarily in employment because of war conditions. After December, 1945, with demobilisation in progress, female employment began increasing again and rose by 13,000 during 1946 and a further 10,000 during 1947. In December, 1947, the number of female wage and salary earners in civil employment (excluding rural workers and female private domestics) was 261,000; 93,000 (55 per cent.) more than in July, 1939.

The construction of defence works, the expansion of government munitions factories, the administration of far-reaching war-time controls, and other activities stemming from the exigencies of war are reflected in the marked growth during the war years in the number of civilians in the employ of governmental authorities. Governmental employment occupied 25.8 per cent. of male and 11.5 per cent. of female wage and salary earners in civil employment in July, 1939. By June, 1943 these proportions had increased to 29.9 and 17.7 per cent. respectively, but then declined to 28.7 and 17.3 per cent. in August, 1945 and to 26.4 and 12.5 per cent. of the total in December, 1947. Additional data of governmental employment are given on page 754 *et seq.* of this volume.

#### WAGE AND SALARY EARNERS IN VARIOUS INDUSTRIES.

In the next statement, the wage and salary earners (excluding rural workers and female private domestics, etc.) in employment in New South Wales in various months between June, 1933 and December, 1947, are classified in broad industrial groups. Employees of governmental authorities have been included in the appropriate industrial groups.

TABLE 676.—Wage and Salary Earners in Industrial Groups,  
New South Wales, 1933 to 1947.

(Excluding rural workers, female domestics in private households,  
and persons on paid strength of defence forces.)

Year and Month.	Mining and Quarry- ing.	Factor- ies.*	Build- ing and Con- struc- tion.	Trans- port and Com- muni- cation.	Retail Trade.	Commerce and Finance.		Person- al and Profes- sional Ser- vices.†	Other ‡	Total Wage and Salary Earners
						Whole- sale Trade.	Other.			
MALES (Thousands).										
1933—June	18.1	94.5	55.1	65.0	44.0	78.4	44.2	25.3	380.6	
1939—July	24.7	158.8	57.9	77.4	44.0	59.0	56.6	51.5	529.9	
1941—July	26.0	202.1	54.0	76.8	41.6	28.7	14.9	49.3	547.7	
1943—July	25.1	217.8	30.1	79.9	28.7	22.9	10.5	39.6	522.1	
1944—July	24.4	217.6	28.2	82.3	28.5	23.4	10.6	42.6	524.2	
1945—July	24.7	216.6	34.2	86.0	30.2	24.3	11.3	45.8	541.2	
1946—July	25.7	239.7	45.1	97.3	42.1	34.3	16.9	57.0	625.4	
Dec.	26.4	242.5	49.5	98.8	46.3	36.1	18.0	60.2	647.4	
1947—Jan.	26.3	243.6	51.0	99.7	45.3	36.4	18.1	61.0	71.9	
Feb.	26.3	245.6	53.0	99.5	45.0	36.8	18.2	61.4	63.8	
Mar.	26.1	249.3	53.0	99.8	45.2	37.1	18.6	62.3	70.3	
April	26.2	250.0	53.0	102.1	45.6	37.0	18.7	62.3	69.9	
May	26.4	250.8	55.1	102.0	45.7	37.5	18.6	62.5	69.4	
June	26.6	252.1	55.7	102.8	46.4	37.6	18.8	62.4	69.1	
July	26.7	254.8	57.0	102.7	46.6	37.9	18.8	62.9	69.3	
Aug.	26.8	256.3	56.8	102.8	46.9	37.9	18.8	63.5	69.6	
Sept.	27.2	257.1	57.4	103.7	47.5	38.4	18.8	63.5	69.8	
Oct.	27.1	257.7	57.5	104.9	48.1	38.6	18.8	63.8	69.9	
Nov.	27.1	257.7	57.5	104.4	49.0	38.9	19.1	63.9	70.3	
Dec.	27.3	256.8	57.0	103.6	50.3	39.9	18.9	64.5	70.3	

TABLE 676.—Wage and Salary Earners in Industrial Groups—*contd.*

Year and Month.	Mining and Quarrying.	Factor-ies.*	Build- ing and Con- struction.	Trans- port and Com- muni- cation.	Retail Trade.	Commerce and Finance.		Person- al and Professional Ser- vices.†	Other. ‡	Total Wage and Salary Earners
						Whole- sale Trade.	Other.			
FEMALES (Thousands).										
1933—June	0-1	36-3	0-3	3-7	.....	33-6§	.....	49-4	2-4	125-8
1939—July	0-1	59-3	0-5	4-2	36-0	.....	8-5	49-1	10-3	168-0
1941—July	0-2	76-0	0-7	8-2	41-0	9-5	8-3	60-2	14-2	218-3
1943—July	0-2	94-6	0-7	12-9	38-5	10-7	9-9	65-9	20-4	253-8
1944—July	0-2	91-6	0-7	13-8	36-3	10-5	10-2	67-7	20-0	251-0
1945—July	0-2	85-7	0-7	14-5	37-5	10-5	10-6	69-6	17-4	248-7
1946—July	0-2	83-1	0-9	12-9	39-2	11-1	10-0	73-3	12-3	243-0
Dec.	0-2	86-4	0-9	12-1	43-1	11-9	9-9	75-8	10-4	250-7
1947—Jan.	0-2	84-3	0-9	12-4	41-6	11-7	10-0	75-8	11-7	248-6
Feb.	0-2	85-7	0-9	12-7	40-3	11-7	10-3	75-9	11-3	249-0
Mar.	0-2	87-3	0-9	12-7	40-5	11-8	10-3	76-7	11-2	251-6
April	0-2	86-6	0-9	12-7	40-6	11-7	10-3	77-3	10-8	251-1
May	0-2	86-5	1-1	12-7	40-7	11-7	10-4	77-0	11-2	251-5
June	0-2	86-5	1-0	12-8	40-7	11-9	10-3	77-1	11-6	252-1
July	0-2	87-0	1-0	12-8	40-9	11-9	10-4	77-1	11-6	252-9
Aug.	0-2	87-6	1-0	13-0	41-0	12-2	10-5	78-3	11-6	255-4
Sept.	0-2	88-0	1-0	13-1	41-5	12-4	10-6	78-5	11-4	256-7
Oct.	0-2	88-5	1-0	13-2	41-8	12-7	10-5	78-8	11-6	258-3
Nov.	0-2	88-9	1-0	13-2	43-4	12-9	10-4	79-3	11-4	260-7
Dec.	0-2	88-4	1-0	13-3	44-3	12-9	10-5	78-8	11-4	260-8
PERSONS (Thousands).										
1933—June	18-2	130-8	55-4	68-7	.....	112-0§	.....	93-6	27-7	506-4
1939—July	24-8	218-1	58-4	81-6	80-0	.....	67-5	105-7	61-8	697-9
1941—July	26-2	278-1	54-7	85-0	82-6	38-2	23-2	109-5	68-5	766-0
1943—July	25-3	312-4	30-8	92-8	67-2	33-6	20-4	105-5	87-9	775-9
1944—July	24-6	300-2	28-9	96-1	64-8	33-9	20-8	110-3	86-6	775-2
1945—July	24-9	302-3	34-9	100-5	67-7	34-8	21-9	115-4	85-5	787-9
1946—July	25-9	322-8	46-0	110-2	81-3	45-4	26-9	130-3	79-6	868-4
Dec.	26-6	328-9	50-4	110-9	89-4	48-0	27-9	136-0	80-0	898-1
1947—Jan.	26-5	327-9	51-9	112-1	86-9	48-1	28-1	136-8	83-6	901-9
Feb.	26-5	331-3	53-9	112-2	85-3	48-5	28-5	137-3	80-1	903-6
Mar.	26-3	336-6	53-9	112-5	85-7	48-9	28-9	139-0	81-5	913-3
April	26-4	336-6	53-9	114-8	86-2	48-7	29-0	139-6	80-7	915-9
May	26-6	337-3	56-2	114-7	86-4	49-2	29-0	139-5	80-6	919-5
June	26-8	338-6	56-7	115-6	87-1	49-5	29-1	139-5	81-0	923-9
July	26-9	341-8	58-0	115-5	87-5	49-8	29-2	140-0	80-9	929-6
Aug.	27-0	343-9	57-8	115-8	87-9	50-1	29-3	141-8	81-2	934-8
Sept.	27-4	345-1	58-4	116-8	89-0	50-8	29-4	142-0	81-2	940-1
Oct.	27-3	346-2	58-5	118-1	89-9	51-3	29-3	142-6	81-5	944-7
Nov.	27-3	346-6	58-5	117-6	92-4	51-8	29-5	143-2	81-7	948-0
Dec.	27-5	345-2	58-0	116-9	94-6	52-8	29-4	143-3	81-7	949-4

\* Excluding working proprietors. From July, 1947, subject to revision.

† Covers Education, Health, Law, Hotels, Restaurants and other Professional and Personal Services.

‡ Covers Governmental employees not classifiable to any other industrial group shown, and persons engaged in Forestry, Fishing, Trapping and Workshops not embraced by the Statistical definition of "Factories".

§ Retail Trade and Commerce and Finance combined.

The course of employment in the various industries groups over the period reviewed bears the impress, firstly, of the necessities of total warfare, including the drastic curtailment of civilian production, and, secondly, after the cessation of hostilities, of general demobilisation of the forces and the resumption of a peace-time economy.

Employment in factories rose substantially to produce essential supplies and equipment, declined somewhat when munitions and other war-time production was tapered off towards the end of the war, and increased steadily throughout 1946 and 1947. (For further details, see chapter "Factories" of this volume). Heavy demands made on the transport and communication services during and since the war are reflected in the increasing number employed in this industrial group.

On the other hand, the distributive, finance, and personal and professional service industries were combed heavily for men and women for the services and essential industries, and a more drastic reduction in

employment in these industries was avoided only by the entry into them of women not subject to manpower control. Employment on building and constructional works, apart from defence works, also fell heavily as private and ordinary governmental building activity attenuated during the war years. Since hostilities ended, however, there has been a marked regain in employment in these industrial groups.

By the close of 1947 employment far exceeded the pre-war level in each of the industrial groups shown in the table, other than building and construction.

#### PERSONS OCCUPIED IN RURAL INDUSTRY.

Particulars of persons occupied in rural industry are available from census and quasi-census enumerations and from annual returns collected under the Census Act, 1901 from the occupiers of rural holdings of one acre or more. The annual farmers' returns in respect of 1941-42 and earlier years showed the number of owners, lessees, and sharefarmers, unpaid relatives, and employees receiving wages who worked permanently full-time during the year. Farmers' returns for 1942-43 and later years show the total number of persons working on the holding at 31st March, distinguishing owners, etc., unpaid relatives, and employees working permanently full-time and those working temporarily for wages or on contract. Females engaged in home duties, unpaid helpers under fourteen years of age, and other persons working only part-time on the holding are omitted from the returns in all years.

The next table shows the number of persons (males and females combined) engaged in rural industries in New South Wales during the years 1933 to 1942 and at 31st March, 1943 to 1947. Permanent full-time workers are classified as owners, lessees, and sharefarmers, unpaid helpers, and as wage and salary earners. The number of persons working temporarily is given for the years available. Tables for each sex in similar form appear on pages 391 and 392 of this Year Book, together with further details of rural employment. Statistics of females working in rural industries are not entirely satisfactory; most women and girls on farms are engaged mainly in home duties and a relatively small proportion of their time is spent in rural production.

TABLE 677.—Persons (Males and Females combined) Occupied in Rural Industries in New South Wales, 1933 to 1947.

(Excluding females engaged in domestic duties and others working only part-time).

Year.*	Working Permanently Full-time.				Working Temporarily on Wages or Contract.	Total Permanent and Temporary.
	Owners, lessees, and sharefarmers.	Unpaid Helpers.	Employees Receiving Wages.	Total.		
1933 ...	71,698	28,663	29,779	130,140	†	†
1939 ...	68,881	22,997	41,522	133,400	†	†
1940 ...	68,741	23,155	41,502	133,398	†	†
1941 ...	67,670	22,500	39,900	130,070	†	†
1942 ...	66,060	20,211	30,131	116,402	†	†
1943 ...	61,564	22,592	29,909	114,065	20,827	134,892
1944 ...	67,034	23,038	26,129	116,201	14,360	130,561
1945 ...	70,616	21,518	25,020	117,154	21,596	138,750
1946 ...	73,891	17,442	28,757	120,090	†	†
1947 ...	76,128	16,940	27,643	120,711	†	†

\* To 1942, during year ended 31st March; from 1943, as at 31st March.

† Not available.

‡ See second paragraph on page 753.

Between 1933 and 1939 the number of persons wholly and permanently engaged in rural industries increased 3,000, a gain of 12,000 employees offsetting the loss of 6,000 unpaid helpers and 3,000 owners and sharefarmers. From the outbreak of war in 1939 to 1941, there was little change in the number of permanent workers, the enlistment of persons engaged in rural industries being discouraged. After Japan entered the war and between 1941 and 1943, many rural workers enlisted in the defence forces or entered the rapidly expanding munitions and aircraft industries, and but for the return to work of retired farmers the decrease in the number of rural workers of 16,000 (6,000 owners and 10,000 permanent employees) would have been much greater. Beginning in 1943 rural workers were released from the armed forces and protected undertakings to re-enter rural industry to expand rural production, and general demobilisation commenced late in 1945. Between 1943 and 1947, the number of permanent rural workers increased 7,000, comprising 15,000 more owners and sharefarmers, 6,000 fewer unpaid helpers, and 2,000 fewer employees.

There was a marked decline in the number of temporary workers between 1939 and 1944. Because of a change in the form of the farmers' return, comparable figures are not available in respect of the years 1946 and 1947. Indications are that, under the influences affecting the number of permanent rural workers, there was a substantial gain between the years 1944 and 1947 in the number of persons working temporarily on farms either for wages or on contract.

Further details relating to employment in rural industries and particulars of salaries and wages paid, etc. are given in the chapter "Rural Industries" (see page 390) of this volume.

#### EMPLOYMENT IN RETAIL STORES.

An index to measure the trend of employment in retail stores has been computed by the Commonwealth Statistician from July, 1941. The index numbers are based on unadjusted data derived from the monthly payroll tax returns of taxable employers whose principal activity is given as retail trade. The index is not adjusted for seasonal variation and reveals the expansion associated with Christmas trading in December when retailers generally employ a considerable number of students, women, and girls who do not seek employment at other periods.

The index of employment (distinguishing males and females) in retail stores for each month of the years 1941 to 1947 is given in the following table. Indices for each month from July, 1933 to March, 1941, but compiled on a different basis, appear on page 603 of the 1939-40 edition of the Year Book.

TABLE 678.—Index of Employment in Retail Stores in New South Wales, 1944 to 1947.

Base: July, 1941 = 100.

Month.	Males.				Females.				Persons.			
	Number of Employees in July, 1941: 31,868.				Number of Employees in July, 1941: 31,840.				Number of Employees in July, 1941: 63,708.			
	1944.	1945.	1946.	1947.	1944.	1945.	1946.	1947.	1944.	1945.	1946.	1947.
January ...	69	72	86	109	92	94	99	106	80	83	92	108
February ...	68	71	88	108	91	94	100	103	80	83	94	106
March ...	69	72	91	109	91	95	100	103	80	83	96	106
April ...	69	72	94	110	90	95	99	103	80	83	96	107
May ...	69	73	96	110	91	95	100	104	80	84	98	107
June ...	69	72	98	112	91	96	100	104	80	84	99	108
July ...	69	72	102	112	91	96	100	104	80	84	101	108
August ...	70	73	102	113	91	97	99	104	80	85	100	109
September ...	69	75	103	115	91	97	100	106	80	86	102	110
October ...	70	76	106	116	92	98	101	107	81	87	103	112
November ...	71	80	109	119	95	101	105	112	83	90	107	116
December ...	74	87	112	122	99	107	110	114	86	97	111	118

The diversion of workers from retail trade to the services and to essential industries was a feature of war-time control of manpower. In the first six months after the entry of Japan into the war nearly 25 per cent. of the males in shops were withdrawn, and throughout 1943-44 the proportion exceeded 30 per cent. At no time, however, did the reduction in female employees exceed 10 per cent., largely because women not subject to manpower control (*i.e.*, of 45 or more years of age) were attracted to the shops in considerable numbers. After the cessation of hostilities, the lifting of the war-time control of labour, the demobilisation of service personnel, and the gradual return towards more normal trading activities, there was a steady increase in employment in retail shops. In the closing months of 1947 the index numbers were from 15 to 20 per cent. above the level in November, 1941.

## GOVERNMENTAL EMPLOYMENT.

The next table shows the extent of governmental employment in June, 1933, December, 1947, and selected intervening months, distinguishing persons in the employ of Commonwealth, State, local, and allied governmental authorities. Persons on the paid strength of the defence forces, including those employees absent on military leave, and government relief workers have been omitted throughout.



TABLE 679.—Governmental Employees in New South Wales, 1933 to 1947.  
(Excluding members of the defence forces).

Year and Month.	Males (Thousands).					Females (Thousands).					Persons (Thousands).				
	C.	S.	L.	A.	Total	C.	S.	L.	A.	Total	C.	S.	L.	A.	Total
1933—June ...	12.7	76.5	14.0	...	103.2	2.4	13.4	1.0	...	16.8	15.1	89.9	15.0	...	120.0
1939—July ...	19.2	94.7	22.6	...	136.5	3.5	14.3	1.6	...	19.4	22.7	109.0	24.2	...	155.9
1941—July ...	28.1	95.4	18.0	...	141.5	5.3	15.2	1.2	...	21.7	33.4	110.6	19.2	...	168.2
1943—July ...	47.9	91.0	13.9	4.1	156.9	23.7	19.0	1.8	1.6	46.1	71.6	110.0	15.7	5.7	203.0
1944—July ...	37.7	91.9	14.3	8.3	152.2	21.7	19.8	1.8	2.3	45.6	59.4	111.7	16.1	10.6	197.8
1945—July ...	39.0	95.5	14.9	7.3	156.7	19.9	19.7	1.8	2.0	43.4	58.9	115.2	16.7	9.3	200.1
1946—July ...	35.9	113.7	18.5	1.7	169.8	13.3	17.4	1.5	6	32.8	49.2	131.1	20.0	2.3	202.6
December ...	38.0	114.1	19.5	1.1	172.7	12.4	17.1	1.6	1	31.2	50.4	131.2	21.1	1.2	203.9
1947—January ...	38.4	114.9	19.3	.9	173.5	12.5	17.4	1.7	2	31.8	50.9	132.3	21.0	1.1	205.3
February ...	38.2	115.9	19.9	.9	174.9	12.5	17.6	1.6	2	31.9	50.7	133.5	21.5	1.1	206.8
March ...	38.8	115.8	20.1	.8	175.5	12.5	17.6	1.7	2	32.0	51.3	133.4	21.8	1.0	207.5
April ...	39.0	116.4	20.3	.7	176.4	12.5	17.6	1.7	2	32.0	51.5	134.0	22.0	.9	208.4
May ...	39.5	116.5	20.7	.7	177.4	12.5	17.7	1.7	2	32.1	52.0	134.2	22.4	.9	209.5
June ...	40.0	117.1	20.7	.4	178.2	12.8	17.7	1.7	1	32.3	52.8	134.8	22.4	.5	210.5
July ...	40.3	117.5	20.8	.4	179.0	12.7	17.8	1.7	1	32.3	53.0	135.3	22.5	.5	211.3
August ...	40.5	118.2	20.8	.1	179.6	12.9	18.0	1.6	1	32.6	53.1	136.2	22.4	.2	212.2
September ...	40.7	118.7	21.0	...	180.4	12.8	18.0	1.7	1	32.6	53.5	136.7	22.7	.1	213.0
October ...	40.9	118.6	21.1	...	180.6	12.8	18.2	1.7	...	32.7	53.7	136.8	22.8	...	213.3
November ...	41.0	118.6	21.0	...	180.6	12.8	18.0	1.8	...	32.6	53.8	136.6	22.8	...	213.2
December ...	41.1	119.3	21.3	...	181.7	12.8	18.1	1.7	...	32.6	53.9	137.4	23.0	...	214.3

C—Commonwealth ; S—State ; L—Local ; A—Allied Governmental Employees.

In July, 1939, 14 per cent. of government employees in New South Wales were in the employ of Commonwealth authorities, 70 per cent. were employed by State authorities, and 16 per cent. by local bodies. By June, 1943 the proportion in Commonwealth employment had increased to 35 per cent. and the proportions with State and local government authorities had fallen to 54 and 8 per cent., respectively. These proportions changed to 29, 58, and 8 per cent. of the total, respectively, in August, 1945 and in December, 1947 were 25, 64, and 11 per cent.

Due to war-time activities (see page 750), the number of Commonwealth employees increased by 49,000 (29,000 males and 20,000 females) between July, 1939 and the peak level in June, 1943. The slackening of munitions production and contracting defence power led to the subsequent decline of 23,000 by March, 1946. Thereafter, employment by the Commonwealth Government increased, as additional functions were assumed, and in December, 1947 the number of persons in Commonwealth employ was 31,000 (males 22,000 and females 9,000) greater than in July, 1939.

Employment by State governmental authorities remained almost unchanged from July, 1939 to the end of 1943, the loss by enlistments being countered mainly by employing persons who normally would be retired and, to some extent, by employing more females. During 1944 there was a small increase of 2,000, and thereafter the number of State employees rose steadily, by 8,000 in 1945, 11,000 in 1946, and 6,000 in 1947. In December, 1947 the number of persons employed by State authorities was 28,000 (24,000 males and 4,000 females) greater than in July, 1939.

The employees of local government authorities were drawn upon heavily for the Services, the Civil Constructional Corps, and other essential activities, and their number fell fairly evenly by 9,000 between July, 1939 and September, 1943. Employment subsequently rose steadily and by December, 1947 had almost regained its pre-war level.

The growth in the employment (civilians only) of Allied Governments, to a peak of 11,000 in August, 1944, reflected the use of Australia as a base for British and Allied military operations and as a sanctuary for certain refugee government administrations.

During the war, many governmental employees were granted leave to serve with the armed forces. The number of employees of State and Commonwealth authorities who were absent on military leave on 30th June, 1940 to 1947 was as follows; a sex distribution of employees absent in 1940 to 1942 is not available:—

At 30th June.	State Employees.		Commonwealth Employees.		Total State and Commonwealth Employees.		
	Males.	Females.	Males.	Females.	Males.	Females.	Persons.
1940... ..		3,963		849			4,812
1941... ..		7,044		1,517			8,561
1942... ..		12,693		1,200			13,893
1943... ..	14,030	170	5,536	90	19,566	260	19,826
1944... ..	13,806	221	5,827	191	19,633	412	20,045
1945... ..	12,433	237	5,792	189	18,225	426	18,651
1946... ..	3,060	71	1,981	71	5,041	142	5,183
1947... ..	494	12	212	7	706	19	725

The number of such employees grew to 20,045 in June, 1944, of whom 14,027 were employees of State authorities and 6,018 of the Commonwealth. During 1944-45, 1,394 returned to civil duty, followed by 13,468 and 4,458 during the next two years. At 30th June, 1947 there were still 725 employees (506 State and 219 Commonwealth) on military leave.

The following statement shows the number of persons employed (excluding those on military leave) in selected State and Commonwealth governmental instrumentalities in New South Wales at 30th June, 1947. These particulars afford some indication of governmental employment according to the nature of the services provided.

TABLE 680.—Employees of Certain Governmental Authorities in N.S.W., 30th June, 1947.\*

(Excluding Employees Absent on Military Leave.)

Authority.	Males.	Females.	Persons.
STATE ADMINISTRATION.			
Agriculture ... ..	1,705	229	1,934
Forestry ... ..	1,766	160	1,926
Water Conservation and Irrigation ...	2,045	102	2,147
Attorney-General ... ..	649	348	997
Police ... ..	4,327	105	4,432
Education (including Teachers and Child Welfare) ... ..	11,036	8,672	19,708
Health ... ..	1,768	1,277	3,045
Labour and Industry ... ..	311	185	496
Lands ... ..	739	189	928
Housing Commission ... ..	538	117	655
Public Works (including Shipbuilding Undertaking) ... ..	6,781	257	7,038
Rural Bank ... ..	958	353	1,311
Maritime Services Board ... ..	2,015	60	2,075
Main Roads ... ..	3,261	143	3,404
Meat Industry Commission ... ..	1,853	45	1,898
Fire Commissioners ... ..	1,172	42	1,214
Metropolitan Water, Sewerage, and Drainage Board ... ..	5,546	143	5,689
Railways ... ..	55,333	2,460	57,793
Road Transport and Tramways ...	11,980	793	12,753

TABLE 680.—Employees of Certain Governmental Authorities\*—*contd.*

Authority.	Males.	Females.	Persons.
COMMONWEALTH ADMINISTRATION.			
Civil Aviation ... ..	331	35	366
Trans-Australia Airlines ... ..	314	91	405
Air ... ..	857	124	981
Aircraft Production ... ..	221	120	341
Army ... ..	843	338	1,181
Munitions (including munitions factories) ... ..	3,051	473	3,524
Navy ... ..	3,980	260	4,240
Australian Broadcasting Commission ... ..	329	349	678
Commonwealth Bank... ..	3,599	1,155	4,754
Council for Scientific and Industrial Research ... ..	586	345	931
Labour and National Service (incl. Employment Division) ... ..	498	308	806
Prices Commission ... ..	371	167	538
Postmaster-General ... ..	16,107	4,938	21,045
Post-War Reconstruction ... ..	256	206	462
Repatriation ... ..	1,091	1,050	3,041
Social Services... ..	242	266	508
Taxation ... ..	1,373	1,083	2,456
Trade and Customs ... ..	1,066	242	1,308
Works and Housing ... ..	2,046	274	2,320

\* See next paragraph.

The figures given in the table are as at 30th June, 1947. Departmental employment may vary greatly as the result of new functions undertaken, inter-departmental transfers and changes in practice in the construction of works, by day labour or under contract. (The figures do not include employees of contractors engaged on governmental works.) It is difficult to trace such changes and their effects, but unless this is done, it is invalid to compare departmental employment from year to year.

## UNEMPLOYMENT.

*Persons Unemployed.*

The number of unemployed persons has been recorded only at the various censuses and quasi-censuses. The following table gives the number unemployed at the Censuses of 1933 and 1947, the National Register, 1939, the Civilian Register, 1943, and the Occupation Survey, 1945. The percentage which the unemployed bore on each of these occasions to all wage and salary earners, comprising those in employment and the recorded unemployed, is also shown. The data in this table should be interpreted in conjunction with the comment following thereupon.

TABLE 681.—Unemployment (All Causes): New South Wales, 1933 to 1947.

Year and Month.	Wage and Salary Earners Unemployed*.			Proportion of Wage and Salary Earners Unemployed.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
	000.	000.	000.	per cent.	per cent.	per cent.
1933—June ...	216.2	48.5	264.7	32.6	22.6	30.2
1939—July ...	112.4	11.6	124.0	15.9	5.0	13.2
1943—June ...	7.7	2.4	10.1	1.3	0.9	1.2
1945—June ...	18.4	7.5	25.9	3.1	2.7	3.0
1947—June† ...	25.4	6.8	32.2	3.3	2.6	3.2

\* Includes some normally self-employed who were without gainful occupation; the estimated number unemployed in 1933 and 1939 has been revised since last issue (1940-41).

† Preliminary.

The figure shown for 1933 is the Census figure adjusted to make allowance for a number of youths and girls who normally would have been wage and salary earners, but who, on account of the economic depression, had never sought employment and were not shown in the schedules as (unemployed) wage and salary earners. The estimate for 1939 is based on the National Register, which covered males aged 18 to 64 years, and data available from other sources. Owing to the absence of a specific definition of an unemployed person on the Civilian Register Card used in 1943, and the use on the Occupation Survey (1st June, 1945) card of the definition "a person normally working for wages, but without a job on 1st June", it appears that the 1943 and 1945 figures exclude some persons who were temporarily absent from their jobs at the dates of the surveys. The data obtained at the quasi-censuses are thus not strictly comparable with those obtained at the Censuses, when the definition was specific.

The proportion of wage and salary earners unemployed in July, 1939 was estimated at approximately 13 per cent. By June, 1943, under conditions of intensive mobilisation of manpower for war purposes, involuntary unemployment was practically nil and unemployment then existing was almost entirely caused by sickness, accident, etc.. The higher level of unemployment recorded in June, 1945 and June, 1947 reflected a limited measure of voluntary unemployment (persons not actively seeking work on account of sickness, industrial dispute, resting between jobs, etc.); involuntary unemployment was negligible and almost confined to unemployables.

#### *Relief of Unemployment and Employment Agencies.*

*Unemployment Benefits.*—Until the Commonwealth legislation providing unemployment, sickness, and special benefits came into operation on 1st July, 1945, social aid services for persons in need of relief on account of unemployment or other cause were provided through the State Labour Exchanges conducted by the State Department of Labour and Industry and Social Welfare. Details of the Commonwealth scheme of benefits are given in the chapter "Social Condition" of this Year Book.

*State Labour Exchanges.*—The functions of these Exchanges in relation to the placement of labour were transferred to the Commonwealth National Service Offices of the Manpower Directorate in March, 1942 to be administered in terms of National Security Regulations. The Re-Establishment and Employment Act, 1945 provided for these functions to remain under Commonwealth administration, as described on page 740 of this volume. The number of adult males registered at State Labour Exchanges at half-yearly intervals from June, 1934 until the exchanges were transferred to the Commonwealth is given on page 557 of the 1940-41 edition of the Year Book.

*War-time Control of Employment.*—War-time control of employment to ensure the intensive mobilisation of manpower for war purposes resulted in the virtual elimination of involuntary unemployment, only a small body of unemployables remaining unemployed. Particulars of the war-time control of employment are given on page 743 of this Year Book and pages 545 and 556 of the 1940-41 edition.

*Private Employment Agencies.*—The Industrial Arbitration Act of New South Wales provides for the licensing and supervision of private employment agencies. At 31st December, 1947 there were twenty-seven licensed agencies, of which nine were in Sydney, ten in the suburbs, and eight outside the metropolitan area.

#### APPRENTICESHIP AND INDUSTRIAL TRAINING.

Conditions of apprenticeship are subject generally to the Apprentices Act of 1901, which prescribes that children may not be indentured until they reach the age of fourteen years and that the hours of work may not exceed forty-eight per week except in farming occupations and in domestic service.

Industrial tribunals are authorised by the Industrial Arbitration Act of New South Wales to attach certain conditions to the employment of apprentices who are serving a period of training under indenture or other written contract for the purpose of rendering them fit to be qualified workers in an industry. An amending Act of 1943 prohibits the taking of a premium or similar reward for entering into any indenture or contract for apprenticeship or training without the consent of the Apprenticeship Council. Apprenticeship awards for various industries prescribing hours of work, wages, term of apprenticeship, extent of technical training, etc. are made by apprenticeship councils constituted for various industries. Each apprenticeship council consists of the Apprenticeship Commissioner as chairman and the members of the conciliation committee established for the particular industry in terms of the Industrial Arbitration Act as described on page 777. Terms of apprenticeship in various trades are prescribed also by awards of Commonwealth industrial tribunals.

In the years 1930 to 1932 there was a rapid falling off in the number of indentures registered due to the unwillingness of employers to bind themselves for a period of five years under adverse economic conditions, and in September, 1933 a system of apprenticeship without indentures, known as "trainee apprenticeship", was introduced as supplementary to the existing system. Under the trainee system an employer who will provide facilities for trainees to learn a trade may be registered as an employer of trainee apprentices. Apprentices and trainees may be required to attend technical or other training schools during hours of work under the Act as amended in 1943.

By National Security Regulations intensive courses of training were provided for persons selected by dilution committees constituted to supervise the dilution of skilled labour in certain trades during the war emergency.

Provision was made to protect the rights of apprentices and trainee apprentices absent from usual employment owing to war service, or whose training was interrupted because of war service of the employer or suspension of his business, or by order of a State or Federal authority for reasons connected with the war. The rights of apprentices engaged on war service and the responsibilities of employers toward them were prescribed also by the Apprentices (War Services) Act, 1939 of the State.

The number of indentured apprentices and trainees registered by the Department of Labour and Industry in New South Wales during various years since 1928 is shown below:—

TABLE 682.—Apprentices Registered, 1928 to 1947.

Year.	Apprentices Registered.			Year.	Apprentices Registered.		
	Indentured.	Trainee.*	Total.		Indentured.	Trainee.	Total.
1928... ..	1,823	...	1,823	1938 ...	1,427	3,800	5,227
1929... ..	1,446	...	1,446	1939 ...	1,317	1,645	2,962
1930... ..	1,005	...	1,005	1940 ...	1,601	1,697	3,298
1931... ..	543	...	543	1941 ...	2,543	2,499	5,042
1932... ..	403	...	403	1942 ...	3,625	738	4,363
1933... ..	529	58*	587	1943 ...	3,910	554	4,464
1934... ..	813	373	1,186	1944 ...	3,903	616	4,519
1935... ..	967	621	1,588	1945 ...	4,536	840	5,376
1936... ..	1,263	963	2,226	1946 ...	5,552	1,605	7,157
1937... ..	1,436	1,347	2,783	1947 ...	5,447	1,239	6,686

\* System introduced in last quarter of 1933.

The following statement shows the distribution of indentured apprentices amongst the various trades at the end of 1935 and certain subsequent years. During the war years, there were large increases in indentures in boilermaking, electrical engineering, sheet metal-working, and shipbuilding trades, reflecting industrial expansion associated with the production of munitions, etc..

TABLE 683.—Apprenticeships in Various Trades in December, 1935 to 1947.

Trades.	1935.	1939.	1941.	1942.	1943.	1944.	1945.	1946.	1947.
Baking ... ..	252	379	390	338	359	326	341	365	341
Boilermaking ... ..	28	161	254	362	483	676	753	753	702
Bootmaking ... ..	298	294	201	280	300	320	331	390	415
Building ... ..	264	742	711	671	707.	842	1,135	1,637	2,028
Butchering ... ..	16	17	22	21	15	18	10	8	5
Coachmaking ... ..	26	31	18	10	16	35	67	116	191
Confectioners ... ..	36	27	26	23	23	20	19	32	22
Electrical ... ..	347	688	910	1,112	1,487	1,908	2,180	2,344	2,350
Engineering ... ..	317	975	1,833	2,472	3,843	5,478	6,048	6,180	6,110
Farriery ... ..	14	12	10	9	9	3	4	5	4
Furniture ... ..	141	303	220	155	127	127	150	260	290
Gas meter making ... ..	10	2	2	1	2	2	2	...	...
Glass-working ... ..	33	109	99	87	72	59	58	61	67
Hairdressing ... ..	156	497	533	569	650	541	669	956	1,193
Jewellery, Plating, etc.	59	128	88	126	131	121	152	103	118
Metal Moulding ... ..	45	114	157	185	230	276	286	247	217
Optical Trades ... ..	20	44	54	59	75	87	89	86	76
Pastrycooks ... ..	67	135	178	169	164	130	154	231	294
Pharmacists ... ..	...	144	171	178	181	161	241	382	485
Printing ... ..	227	285	252	239	205	217	204	215	225
Sheet Metal-working and Tin-smithing ... ..	8	18	25	38	103	189	254	288	280
Ship and Boat Building	19	55	106	117	137	137	156	200	203
Other ... ..	40	64	217	102	140	104	128	256	279
Total ... ..	2,423	5,224	6,477	7,323	9,459	11,777	13,431	15,115	15,895

#### INDUSTRIAL HYGIENE.

In both State and Federal Departments of Public Health, sections have been created to deal with industrial hygiene. The work of these units

embraces the investigation of occupational diseases, the supervision of health conditions in industry, and the dissemination of advice regarding measures which safeguard the health of the workers. Responsibility in this regard in respect of the coal mining industry devolves upon the Joint Coal Board.

Legislation relating to factories and shops, scaffolding and lifts, and mining and shipping imposes upon employers the obligation to safeguard their employees against industrial risks. Employers may be required by order of the Federal Minister of Labour and National Service to instal safety equipment and lighting of approved standards in their factories and workshops, and in 1946 it was provided that new factories or structural alterations and additions to factories must conform to approved standards.

A Factory Welfare Board was established in New South Wales in June, 1942 to advise the Minister in regard to the welfare of employees and the prevention of accidents. The Board comprises representatives of employers and employees, with the Chief Inspector of Factories as Chairman. Welfare committees and safety committees function in individual factories.

Factories and shops must be registered annually by the Department of Labour and Industry and Social Welfare. The employment of women and juveniles in factories is subject to limitations. Outworkers in the clothing trades must be licensed by the Industrial Registrar of New South Wales. Lift-attendants and crane-drivers must obtain certificates of competency. Inspection with the object of securing compliance with the law is conducted by inspectors of the Department of Labour and Industry and Social Welfare.

#### INDUSTRIAL ACCIDENTS.

Under various enactments relating to industrial hygiene, employers are required to give notice to the statutory authority of accidents which cause injury to workers, but the available data do not supply a comprehensive record of such occurrences. In factories, employers are required to report accidents causing loss of life; accidents due to machinery or to hot liquid or other hot substance, to explosion, escape of gas or steam, to electricity or to acid or alkaline solutions, if an employee is so disabled as to prevent him from returning to his work in the factory within forty-eight hours; and other accidents if an employee is disabled for seven days or more. New requirements introduced in 1946 were the notification of every case of lead, phosphorus, arsenical or mercurial poisoning or poisoning due to work in connection with radio-active substances, or any other disease due to any cause which may be specified by order, and the submission by factory occupiers of a six-monthly return of all accidents and diseases which have occurred.

In 1946 the number of accidents in factories was 16,392, of which 21 were fatal and 142 caused permanent injury. Accidents were more numerous than in 1939 but relative to the number of factory workers the increase was small. Heavy overtime and intensity of work under the stress of war were factors in the higher incidence of accidents in factories in 1943 and 1944. Accidents, classified to show the extent of injury, in recent years, were as follows:—

Extent of Injury—	1939.	1941.	1942.	1943.	1944.	1945.	1946.
Fatal ... ..	21	25	29	31	9	12	21
Permanent ... ..	126	204	175	156	115	122	142
Temporary ... ..	9,042	13,492	16,642	20,100	20,195	16,741	16,229
Total Accidents ...	9,189	13,721	16,846	20,287	20,319	16,875	16,392

The number of accidents reported in connection with lifts, scaffolding and cranes with the included number which proved fatal shown in parentheses was 176 (12) in 1943, 240 (19) in 1944, 541 (6) in 1945 and 481 (7) in 1946 but the records were incomplete in some of these years. Particulars of accidents in mines and of railways and tramway accidents are shown in other chapters of this Year Book.

#### WORKERS' COMPENSATION.

In New South Wales provisions for the compensation of workers and their dependants in respect of injury sustained in connection with their employment are made by the Workers' Compensation Act, 1926-47 and by other Acts, the most important of which are the Workers' Compensation (Silicosis) Act, 1942-46, and the Workers' Compensation (Broken Hill) and Workers' Compensation (Lead Poisoning—Broken Hill) Acts.

The Police Regulation (Superannuation) Act, as described in the chapters "Social Condition" and "Police" of this volume, provides for compensation to members of the police force killed or disabled by injury in the execution of duty, and laws of the Commonwealth provided for compensation to men in particular classes of work, such as that of seamen, which are subject to special risks and to workers in the service of the Commonwealth Government.

The Workers' Compensation Act is administered by the Commission described in the chapter "Law Courts" of this Year Book and administrative expenses are paid from the Workers' Compensation Fund, to which insurers contribute by annual levy on total premiums in respect of workers' compensation insurance.

Separate committees, each comprising two representatives of employers, two representatives of the workers and an independent chairman, administer the Acts relating to silicosis and to workers in the mines at Broken Hill. Appeal on questions of fact and of law from decisions of these committees lies to the Workers' Compensation Commission.

In 1945 an Insurance Premiums Committee comprising the Chairman of the Workers' Compensation Commission, a member nominated by insurers and an officer of the public service was established. This Committee is responsible for the application of the fixed loss ratio scheme which it prepared in connection with insurance effected under the Workers' Compensation Act (described later) and is required to levy and collect from insurers contributions to meet the cost of compensation under the Silicosis Act. It has the powers of a Royal Commission to investigate matters connected with its general functions and in investigating and reporting upon matters affecting workers' compensation insurance when so required by the Minister for Labour and Industry and Social Welfare.

#### WORKERS' COMPENSATION ACT, 1926-47.

Under the Workers' Compensation Act, workers remunerated at rates not exceeding £750 per annum who become incapacitated for a period of at least three days (prior to July, 1942, £550 and seven days) are compensatable. The limit of income is exclusive of payments for overtime, bonuses and special allowances. Certain workers such as contractors for rural work are eligible also provided they do not sublet the contract nor employ other persons.

Compensatable injury is defined under the Act as personal injury arising "out of or in the course of the employment", including a disease contracted in the course of employment to which the employment was a



contributing factor. Diseases caused by silica dust are compensatable under this Act only in the case of persons employed in or about coal mines. Compensation is payable for workers injured on daily or periodic journeys between place of abode and place of employment. Injured workers and their dependants, including wife and children under school-leaving age, receive compensation in the form of weekly payments or lump sum (limited until 1942 to £1,000 to any one case) and also the cost of medical and hospital treatment and ambulance service.

From 1st May, 1945 the weekly rates of compensation and the liability of employers for payment of hospital expenses were increased (mostly by from one-sixth to one-fifth) and a worker electing to take a lump-sum payment in respect of an injury became entitled to a payment of not less than 50 per cent. of the prescribed lump sum for such injury, irrespective of the amount of weekly compensation received. From the same date the earnings in war work of a widow or the female member of the family acting as housekeeper and normally dependent upon a deceased worker were disregarded in determining entitlement to compensation, and the wife or a female member of an injured worker's family obliged to leave employment to care for him became compensatable.

In 1947 compensation was made payable in respect of workers, engaged by employers in New South Wales, who suffer injury in the course of employment in other parts of the Commonwealth, provided that compensation therefor has not been received otherwise than under the New South Wales Act.

Every employer is required to insure with a licensed insurer against his liability to pay compensation, unless he is authorised by the Workers' Compensation Commission to undertake the liability on his own account. The penalty for default is a fine not exceeding £100 or (since July, 1942) imprisonment for a period not exceeding six months. A scheme was established, as from 1st July, 1942, to enable the Commission to pay from the Workers' Compensation Fund an aggregate amount not exceeding £5,000 in any year in respect of awards made since 10th May, 1941 against employers who were not insured. Employers are liable to reimburse the Commission the amounts paid in such cases.

The Insurance Premiums Committee prepared a Fixed Loss Ratio Scheme in connection with workers' compensation insurance which was introduced as from 1st July, 1945. Under the scheme rates of premium payable in respect of workers' compensation insurance are fixed relative to a loss ratio percentage and both rates of premium and the loss ratio may be varied from time to time. Any licensed insurer or class of insurers may be exempted from the scheme and the Commission may cancel licenses in its discretion.

In 1945-46 the prevailing premium rates were made the maximum rates and the fixed loss ratio was determined as 70 per cent. These rates and ratio applied in 1946-47 when insurers expended only 62.67 per cent. of the combined total premium income as cost of claims of and against all insurers, and they were required to expend the difference in rebates to insurers (5 per cent.) and in payments to the Equalisation Reserve (2.33 per cent.). The funds of the Reserve may be applied by the Committee toward meeting deficiencies when the total amount of claims exceeds the fixed loss ratio.

Silicosis contributions are not taken into account in determining the loss ratio under this scheme.

Employers are required to supply returns to the Workers' Compensation Commission in respect of cases admitted to compensation in terms of the Act. The number of cases for which returns are supplied does not represent the actual number of injuries sustained by workers in the course of their employment. There are groups of employees outside the scope of the Workers' Compensation Act, such as casual workers (unless employed for purposes of the employer's trade or business), outworkers, employees whose remuneration exceeded £750 (prior to July, 1942, £550) per annum during the period under review, and the police and others for whom special provision is made under other Acts. Also there are employees who are paid full wages in cases of illness or accident and, as a general rule, compensation is not claimed in respect thereof unless death or serious disability results. Other cases excluded from the returns are those for which the employer was not liable for compensation in terms of the Workers' Compensation Act, though in some such cases insurers provide compensation in terms of contracts with employers, *e.g.*, injuries which did not disable the worker for the minimum period.

The following statement shows for each of the five years ended June, 1947 (a) the number of reported cases of compensable injury in each year, *excluding* cases of injury sustained in a previous year but compensated partly or wholly in the current year, and *including* cases arising in the current year but "unclosed" (payments incomplete) at the end of that year; and (b), the amount of compensation paid in each year, *including* payments during the year on cases that were "unclosed" at the beginning of the year, and *excluding* outstanding liability on cases "unclosed" at the end of that year.

TABLE 634.—Workers' Compensation Act—Compensation Cases Reported, 1942-43 to 1946-47.

Year ended June,	(a) Number of Reported Cases of Compensatable Injuries in the Year.*			(b) Amount of Compensation Paid in the Year.*
	Males.	Females.	Total.	
1943 ...	68,018	6,760	74,778	£ 1,475,407
1944 ...	85,631	8,990	94,621	1,902,698
1945† ...	89,638	9,229	98,867	1,841,916
1946 ...	90,624	7,393	98,017	2,200,726
1947 ...	105,398	7,964	113,362	2,471,921

\* See definitions preceding table.

† Late returns for 1944-45—1,982 male workers and 174 female workers—are not included in the table.

The observations preceding the table make it apparent that the number of cases cannot be related to the amount of compensation paid, nor is it possible to calculate accurately either the amount of compensation per case or the average duration of cases.

The number of cases of injuries to males and the amount of compensation paid increased greatly between 1942-43 and 1946-47. Substantial factors in the increase were extension of the provisions of the Act and the rapid increase in the number of males in civilian employment as a result of general demobilisation during the latter part of 1945 and throughout 1946.

The particulars for the years 1942-43 to 1944-45 are deficient in some degree because of non-supply of returns but those for 1945-46 and 1946-47 are deemed to be nearly complete. The differences in coverage, however, do not appear to have affected the year to year comparisons very materially.

The statement given below classifies new compensation cases reported in each of the five years as shown in the preceding table to distinguish those arising from industrial diseases and from accident in travelling to or from and in the course of employment, and shows also the number of fatal cases similarly classified.

TABLE 685.—Workers' Compensation Act—Classification of Compensation Cases, 1942-43 to 1945-46.

Year ended June.	Injury by Industrial Disease.		Injury by Accident.						Total Cases- Reported.	
			On Journey to or from Employment.		In course of Employment.		All Cases.			
	Fatal.*	Total.	Fatal.*	Total.	Fatal.*	Total.	Fatal.*	Total.	Fatal.*	Total.
Male Workers.										
1943 ... ..	5	1,616	†	1,081	112†	65,321	112	66,402	117	68,018
1944 ... ..	23	2,099	6	1,705	132	81,827	138	83,532	161	85,631
1945 ... ..	20	2,732	19	2,364	153	84,542	177	86,906	197	89,638
1946 ... ..	9	2,398	17	2,426	86	85,800	103	88,226	112	90,624
1947 ... ..	23	2,736	41	3,275	156	99,387	197	102,662	220	105,398
Female Workers.										
1943 ... ..	...	658	†	356	3†	5,746	3	6,102	3	6,760
1944 ... ..	...	704	1	580	2	7,706	3	8,286	3	8,990
1945 ... ..	1	836	2	764	1	7,629	3	8,393	4	9,229
1946 ... ..	1	534	...	621	1	6,238	1	6,859	2	7,393
1947 ... ..	1	511	...	808	3	6,645	3	7,453	4	7,964
Male and Female Workers.										
1943 ... ..	5	2,274	†	1,437	115†	71,067	115	72,504	120	74,778
1944 ... ..	23	2,803	7	2,285	134	89,533	141	91,813	164	94,621
1945 ... ..	21	3,568	21	3,128	159	92,171	180	95,299	201	98,867
1946 ... ..	10	2,932	17	3,047	87	92,038	104	95,085	114	98,017
1947 ... ..	24	3,247	41	4,083	159	106,032	200	110,115	224	113,362

\* Included in total. † "On journey" cases included with "in course of employment" cases.

In 1946-47 the proportion of the cases of injury due to industrial diseases was 2.6 per cent. for male workers compared with 6.4 per cent. for female workers, and of the on journey cases, the proportion for females (10.2 per cent.) was more than three times that for males (3.1 per cent.). The proportion of on journey cases for male and female workers together increased from 1.9 to 3.6 per cent. of all cases between 1942-43 and 1946-47.

Stated per thousand cases, fatal cases amongst male workers in 1946-47 were 8.4 from industrial diseases, 12.5 from on journey accidents and 1.57 from accidents whilst at work.

In respect of male workers, cases of compensation in 1946-47 were most numerous in metal and machinery works, 24,998, with mining, 13,612, next in order, followed by commercial storage, retailing, etc., 9,102, building, 7,609, rural industries, 6,444, food and drink factories, 6,423, and construction and maintenance of works, 6,194. In that year, for female workers, about one-half of the cases were in manufacturing industries, and 30 per cent. in domestic and personal employment.

Particulars of the total amount of compensation paid under the Workers' Compensation Act during 1946-47, as defined in the paragraph preceding Table 684, are given below:—

TABLE 686.—Workers' Compensation Act—Compensation Payments, 1946-47.

Particulars.	Amount of Compensation.		
	Male Workers.	Female Workers.	Total.
	£	£	£
Fatal Cases ... ..	82,493	70	82,563
Disability Compensated by—			
(i) Lump Sum ... ..	299,268	15,067	314,335
(ii) Weekly Payments—			
On Account of Worker ... ..	1,266,531	64,941	1,331,472
On Account of Dependants ... ..	401,501	433	401,934
Medical Treatment, etc.... ..	314,566	27,051	341,617
Total (ii) ... ..	1,982,598	92,425	2,075,023
Total Disability Cases ... ..	2,281,866	107,492	2,389,358
Total—All Cases ... ..	2,364,359	107,562	2,471,921

The estimated cost to employers of insurance effected (including the estimated premiums which would have been payable by self-insurers) covering workers under the Workers' Compensation Act, 1926-46, and the number of compensatable injuries as reported by insurers (which exceeds the number shown by employers' returns) in each of the last ten years is given in the next table. Because of changes in the scope of the Act, and the marked increase in employment and the amount of wages paid during the period, the comparative significance of the figures is limited. Similar information for the years 1925-26 to 1940-41 was published in Table 479 of the Year Book for 1940-41, but certain supplementary information included in that table is not available to enable its continuation for later years.

TABLE 687.—Workers' Compensation Act—Cost of Insurance, and Compensatable Injuries, 1937-38 to 1946-47.

Year ended June.	Estimated Cost to Employers of Worker's Compensation Insurance.	Compensatable Injuries as reported by Insurers.	Year ended June.	Estimated Cost to Employers of Worker's Compensation Insurance.	Compensatable Injuries as reported by Insurers.
	£	No.		£	No.
1938 ...	2,411,049	84,407	1943 ...	3,784,045	122,990
1939 ...	2,577,046	80,713	1944 ...	3,769,874	116,605
1940 ...	2,547,985	78,276	1945 ...	3,710,055	118,316
1941 ...	2,827,688	82,457	1946 ...	3,645,233	124,301
1942 ...	3,324,110	97,443	1947 ...	4,172,429	148,026

*Workers' Compensation (Broken Hill) Acts.*

The Workmen's Compensation (Broken Hill) Act, 1920-1942 and Workmen's Compensation (Lead Poisoning—Broken Hill) Act, 1922-1924 provide compensation for Broken Hill miners disabled by certain industrial

diseases which cause gradual disablement. At Broken Hill there is a Bureau of Medical Inspection for the examination of men selected for employment in the mines and of employees with symptoms of lead poisoning or pneumoconiosis or tuberculosis.

Compensation in cases of pneumoconiosis or tuberculosis contracted in the Broken Hill mines is paid by the mine owners without contribution by the Government if the worker was employed in any of the mines after 31st December, 1920. For other cases the Broken Hill Pneumoconiosis-Tuberculosis Fund is maintained by contributions—one-half by the Government of New South Wales and one-half by the mine owners. The following statement shows particulars of cases of compensation paid by mine-owners and from the Broken Hill Fund as at 30th June of each year 1942 to 1947:—

TABLE 688.—Workers' Compensation (Broken Hill) Acts—Beneficiaries and Compensation Payments, 1941-42 to 1946-47.

Year ended June.	Compensation by Employers.				Compensation from the Fund.			
	At 30th June.			Payments during Year.	At 30th June.			Payments during Year. *
	Cases.	Beneficiaries.			Cases.	Beneficiaries.		
		Workers.	Depend-ants.			Workers.	Depend-ants.	
	No.	No.	No.	£	No.	No.	No.	£
1942 ...	71	46	93	11,630	680	245	593	91,926
1943 ...	74	47	91	12,925	577	229	566	93,941
1944 ...	82	53	108	15,038	567	208	554	95,614
1945 ...	89	56	105	16,088	570	204	549	92,684
1946 ...	90	56	98	18,305	561	197	532	100,698
1947 ...	88	52	96	17,843	553	179	524	102,607

\* Including management expenses.

Disbursements from the fund in 1946-47 were £102,607, comprising compensation, £99,817, funerals and special expenses, £649, and management expenses, £2,141. Payments from the fund from its inception on 1st January, 1921 to 30th June, 1947 totalled £2,561,991 of which £73,970 was management expenses. Broken Hill mine-owners made payments under the Act totalling £227,074, and the aggregate disbursement to 30th June, 1947 was £2,789,065. In all, 1,062 mine workers have been compensated under the Act since its inception, including 231 receiving payments at 30th June, 1947.

*Workers' Compensation (Silicosis) Act, 1942-46.*

Particulars of the two limited schemes in operation prior to 1942 for compensation for workers, other than Broken Hill miners and coal miners compensatable under the Workers' Compensation Act, contracting disease by exposure to silica dust are given at pages 564 and 565 of the 1940-41 edition of the Year Book.

The Workers' Compensation (Silicosis) Act, 1942 provides a comprehensive scheme of compensation in respect of death or disablement through exposure to silica dust of workers other than Broken Hill miners and coal miners covered in that respect by the Acts described in preceding pages.

The new silicosis scheme commenced as from 1st July, 1942, under the administration of the Workers' Compensation (Silicosis) Committee (see page 762). The existing schemes were transferred to the new fund, and right to benefit was conferred also in sixty-one special cases, *e.g.*, ex-beneficiaries who had exhausted the limited provision under the former legislation and ex-employees who otherwise were ineligible.

The Committee determined the classes of employment in various industries in which workers are exposed to risk of silica dust disease. Employers having workers employed in those classes were required to contribute to the fund at rates fixed by the Committee in proportion to the amount of wages paid to such workers, and the Government undertook to subsidise the fund by £20,000 annually for a period of five years; extended to ten years in 1946.

The Act was amended in 1945; rates of weekly payments to beneficiaries were increased and further special cases, forty-four in number, were placed on the fund. With the introduction of the fixed loss ratio scheme (see page 763), the obligation to contribute to the fund was transferred from 1st July, 1945 to the insurers of the employers concerned, the Insurance Premiums Committee fixed the rates of contribution, and the amount of insurers' contribution was made recoverable from the employers.

The Insurance Premiums Committee, however, found that to cover the cost of benefit at the increased rates, as well as the cost of the special cases, very high rates of contribution would be required from the industries with silicotic hazard. Therefore the Act was amended further in 1946, spreading the cost over industry generally by means of an annual levy on the premium incomes of all insurers under the Workers' Compensation Act, 1926-47.

The classes of employment covered by the silicosis scheme in 1946-47 were in the following industries: abrasive soaps and powders, asbestos, bricks, tiles, pottery, refractory materials, glass making, metal mining, metal trades, ore milling, paint manufacturing and sandstone. The levy on wages paid to the workers concerned was  $\frac{3}{4}$  per cent. in the metal trades industry and 3 per cent. in other industries in 1942-43 and 1943-44, and since 1st June, 1944 the rates have been  $1\frac{3}{4}$  per cent. and 6 per cent., respectively. In addition, a levy of 10d. per £100 of wages paid in all other classes of employment under the Workers' Compensation Act (except where the tariff rate of premium is per capita) was made in 1945-46 and 1946-47.

The Silicosis Committee received 350 applications from workers during the year ended 30th June, 1947, and on these and some applications from the previous year made ninety-two awards of compensation. Compensation awards in the five years ended June, 1947 numbered 609 of which 465 were in respect of workers who had complied with the general provisions of the Act and 144 were under its special provisions. Between 1942 and 1947 there were 172 silicotic workers who died, 141 from silicosis and 31 from other causes. The number of workers to whom weekly payments were being made under awards current at 30th June, 1947 was 465.

Particulars of operations on the Workers' Compensation (Silicosis) Fund in each of the years 1942-43 to 1945-46 are given in the following table:—

TABLE 689.—Workers' Compensation (Silicosis) Fund: Income and Expenditure, 1942-43 to 1946-47.

Year ended 30th June.	Income.			Expenditure.					
	Employers' Contributions.	Treasury Grant.	Total.	Compensation Payments.				Administrative and Other Expenditure.	Total.
				Compensation.	Deposits on Trust for Dependents.	Medical, etc., Expenses.	Total.		
1943 ...	£ 15,797	£ 20,018	£ 35,815	£ 33,867*	£ †	£ †	£ 33,867	£ 3,353	£ 37,220
1944 ...	22,887	20,050	42,937	46,038	6,907	1,642	54,587	1,941	56,528
1945 ...	40,081	20,000	60,081	59,018	12,635	2,408	74,061	1,853	75,914
1946 ...	19,206§	33,000	52,233‡	77,945	9,248	2,537	89,730	1,917	91,647
1947 ...	84,514	20,000	104,514‡	86,463	12,420	2,831	101,714	2,017	103,731

\* Includes £18 under former scheme. † Included under compensation payments.

‡ Includes other income; £2 in 1944-45, £27 in 1945-46 and £4 in 1946-47. § Period 1st July to 31st December, 1945; first payment by Premiums Committee not made until August, 1946. || Insurance Premiums Committee, £84,451; Employer's contributions, £63.

The accumulated deficiency of the fund (financed by loans from the Treasury) was reduced from £65,778 at 30th June, 1946 to £30,992 at 30th June, 1947.

#### *Cost of Workers' Compensation Insurance.*

The Workers' Compensation Commission estimated the amount of wages paid to workers covered by the Workers' Compensation Act, 1926-47 at £189,877,888 in 1945-46 and £242,037,811 in 1946-47. Relating these amounts to the cost of insurance shown in Table 687, the average cost of insurance under the Act per £100 of wages paid was £1.92 in 1945-46 and £1.72 in 1946-47.

In compensating workers under the special Acts relating to silicosis and Broken Hill miners, the costs incurred were £91,647 and £119,003, respectively, in 1945-46, and £103,731 and £120,449, respectively, in 1946-47. These sums added to those given in respect of the principal Act gave totals of £3,855,873 and £4,396,609 in the successive years, but as noted elsewhere, there are workers compensated otherwise than under these Acts. Therefore, although these totals represent the major part they do not represent the total cost of workers' compensation insurance in New South Wales.

#### REGISTRATION OF SHOPS.

Provision for the annual registration of shops is made by the Factories and Shops (Amendment) Act, 1936 which commenced on 31st July of that year. The provision for registration does not apply to the whole State but to proclaimed shopping districts, including the metropolitan shopping district which is bounded approximately by a line joining (and including) Manly, Hornsby, Parramatta and George's River, and the Newcastle shopping district which is the City of Greater Newcastle. All the other municipalities and most of the unincorporated country towns are shopping districts.

The following particulars of registered shops and employees engaged in or in connection with the sale of goods have been compiled from returns supplied to the Department of Labour and Industry and Social Welfare.

Waiters and waitresses are included as shop employees in restaurants—which are classified as a separate group. Persons such as those engaged in factory or other work preparing goods to be sold, commercial travellers, newsboys, sellers in theatres, hairdressers working in saloons attached to shops selling hairdressers' goods, and mechanics working in garages where petrol is sold are excluded.

Comparisons as between years are affected to some extent by variations in the proportion of returns supplied for tabulation and by alterations in the areas embraced in shop registration districts. None of the tables includes shops in non-shopping districts registered for the sale of petrol and oil; these numbered 967 with 1,383 male and 376 female employees in 1942 (when first recorded) and 736 with 721 male and 375 female employees in 1947.

The following table shows as at 30th June of each year 1939 to 1947 the number of shops registered in proclaimed shopping districts in New South Wales, distinguishing those employing labour, and giving particulars of wage-earners employed according to sex and adult and junior status:—

TABLE 690.—Shops Registered in Shopping Districts, New South Wales—  
Number and Employees, 1939 to 1947.

At 30th June.	Shops.			Male Employees.		Female Employees.		Total Employees.		
	Not Em- ploying Labour.	Em- ploying Labour.	Total.	Adults.	Minors.	Adults.	Minors.	Males.	Females.	Total.
1939	13,843	15,904	29,747	30,144	13,950	20,967	16,052	44,103	37,019	81,122
1940	14,440	16,556	30,996	30,545	14,373	21,413	17,200	44,918	38,613	83,531
1941	14,476	16,170	30,646	28,977	13,663	22,874	18,672	42,640	41,546	84,186
1942	14,270	16,106	30,376	24,731	10,801	26,086	20,073	35,532	46,159	81,691
1943	13,170	15,621	28,791	22,312	8,897	26,865	17,502	31,209	44,367	75,576
1944	13,013	15,895	28,908	21,094	8,477	27,721	16,659	30,471	44,380	74,851
1945	12,709	16,294	29,003	22,107	8,914	27,705	17,099	31,021	44,804	75,825
1946	10,871	17,141	28,012	33,753	11,774	27,953	19,689	45,527	47,642	93,169
1947	10,930	18,303	29,233	37,266	11,941	29,444	18,516	49,207	47,960	97,167

Retail trade activity expanded in the early stages of the war. After the extension of warfare to the Pacific area, the calling-up of men for military service and the diversion of labour by manpower direction to war and essential industries caused a marked decrease in shop employees. Between June, 1941 and June, 1943, there was a decrease in male employees in registered shops of 11,431 which was far from offset by an increase in females of 2,821; during this period the replacement of the younger women withdrawn by women above the age of 45 years (who were not subject to manpower direction) was widespread. Employment in shops changed but little during the next two years, but thereafter demobilisation of service personnel and the cessation of manpower controls, and in 1947 the gradual improvement in supplies of commodities, enabled retail employment to increase rapidly. In June, 1947 there were over 16,000 (nearly 20 per cent.) more shop employees than in 1939 with males 5,104 and females 10,941 greater in number. The proportion of minors in the total decreased from 37 per cent. in 1939 to 31.3 per cent. in 1947, the school-leaving age having been raised by one year in that interval.



The number of shops declined during the critical years of the war, but except during that period the number of shops having employees has tended to increase; of the total these comprised 53.5 per cent. in 1939 and 69.5 per cent. in 1947.

The classification of shops is not such as to show the number in which commodities of particular types are sold, because the shops classed as "General Grocery, Drapery, etc." include large departmental and chain stores in which the range of goods sold is very wide. The number of shops in this large group comprised 53.1 per cent. of the total in 1942 and 57.6 per cent. in 1947, and in those years had 72.9 per cent. and 70 per cent., respectively, of all wage-earners employed in registered shops.

Over the period 1942 to 1947, restaurants and separate shops supplying cooked provisions, fish, and refreshments decreased numerically, but gained 23 per cent. in employees, probably due in some part to food rationing of householders, which also may have been a factor in a decrease in the number of and employment in butcher shops. The hairdressing goods, tobacconist and newsagent shops as a group were reduced in number, but showed a gain of 49 per cent. in employment over the period. Notwithstanding the rationing of motor spirit and a decrease of nearly 20 per cent. in number, shops registered in shopping districts for the sale of petrol and oil had approximately 49 per cent. more employees in 1947 than in 1942.

Particulars regarding the registered shops in the metropolitan, Newcastle and other shopping districts at 30th June, 1947, and the wage earning employees engaged therein are shown below:—

TABLE 691.—Registered Shops—Classification of Employees, June, 1947.

Particulars.	Shops in Proclaimed Shopping Districts.								
	Metropolitan.		Newcastle.		Other.		All Shopping Districts.		
Registered Shops—									
Not employing labour ...	6,939		474		3,517		10,930		
Employing labour ...	9,962		792		7,549		18,303		
Total ...	16,901		1,266		11,066		29,233		
	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Total.
Shop Assistants—									
Adults ...	11,941	13,693	925	660	7,998	4,059	20,864	18,412	39,276
Minors ...	3,587	5,599	459	979	3,867	5,749	7,913	12,327	20,240
Total ...	15,528	19,292	1,384	1,639	11,865	9,808	28,777	30,739	59,516
Office Assistants—									
Adults ...	1,846	3,857	84	188	763	1,110	2,693	5,155	7,848
Minors ...	393	2,171	16	374	244	1,625	653	4,170	4,823
Total ...	2,239	6,028	100	562	1,007	2,735	3,346	9,325	12,671
Other Employees—									
Adults ...	9,225	5,028	559	313	3,925	536	13,709	5,877	19,586
Minors ...	1,621	1,161	179	199	1,575	659	3,375	2,019	5,394
Total ...	10,846	6,189	738	512	5,500	1,195	17,084	7,896	24,980
Total Employees—									
Adults ...	23,012	22,578	1,568	1,161	12,686	5,705	37,266	29,444	66,710
Minors ...	5,601	8,931	654	1,552	5,686	8,033	11,941	18,516	30,457
Total ...	28,613	31,509	2,222	2,713	18,372	13,738	49,207	47,960	97,167

In the metropolitan shopping district there were 16,901 registered shops and paid labour was employed in 9,962 shops. The number of employees was 60,122, or 6 per shop with wage-earning employees. In other shopping districts, including Newcastle, there were 12,332 registered shops and 8,341 shops employed 37,045 persons or between four and five per shop. There was a majority of females employees in the metropolitan and Newcastle shops, but in country shops 57 per cent. were males.

Awards made by the Industrial Commission of New South Wales in October, 1937 for shop assistants in the metropolitan and Newcastle districts and in July, 1938 for those in country districts contain provision for the allocation of work between males and females, and a relative proportion of juniors to seniors. Certain groups of shops are classified according to the commodities offered for sale therein. In one group, which includes shops or departments for the sale of groceries, mercery, hardware, furniture, sports goods, motor vehicles or bicycles, all the assistants must be paid at the rates prescribed for males. In the second group of shops or departments the employer may employ all female assistants to sell such goods as women's clothing, haberdashery, fancy goods, etc.. In shops not classified in these two groups the award prescribed that 50 per cent. of the assistants must be males, but this rule did not apply where less than three shop assistants were employed, and it was suspended in April, 1942, owing to shortage of male workers. As a general rule, the proportion of juniors to seniors must not exceed one to one; a senior is defined as an assistant twenty-three years of age or over receiving the full rate of wages, including any employer actively engaged in the shop.

The following statement shows the number of male and female employees as recorded in returns supplied in 1939 to 1947. As noted previously, comparisons from year to year are affected by varying coverage of the returns and by alterations in the area embraced in shop registration districts:—

TABLE 692.—Registered Shops—Employees, June, 1939 to 1947.

At 30th June.	Metropolitan.		Newcastle.		Other Districts.		All Shopping Districts.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Total.
1939	25,229	25,853	1,947	1,491	16,927	9,675	44,103	37,019	81,122
1940	25,181	26,684	2,301	1,853	17,436	10,076	44,918	38,613	83,531
1941	23,887	28,785	2,139	2,106	16,614	10,655	42,640	41,546	84,186
1942	19,609	30,854	1,706	2,428	14,217	12,877	35,532	46,159	81,691
1943	16,920	28,894	1,436	2,588	12,853	12,885	31,209	44,367	75,576
1944	16,003	28,104	1,404	2,607	13,064	13,669	30,471	44,380	74,851
1945	16,183	28,249	1,376	2,730	13,462	13,825	31,021	44,804	75,825
1946	25,599	31,106	2,106	2,821	17,822	13,715	45,527	47,642	93,169
1947	28,613	31,509	2,222	2,713	18,372	13,738	49,207	47,960	97,167

During the period covered by the table there were increases of 5,104 in male employees and 10,941 in female employees in registered shops. Over the eight years wage-earners in all registered shops increased by 19.8 per cent.; the increase was proportionally greater in the Newcastle (43.5 per cent.) and the country shopping districts (24.3 per cent.) than in the metropolitan district (17.7 per cent.). In all districts, female shop employees increased by 29.6 per cent., the proportional gains being 21.9 per cent. in the metropolitan, 81.9 per cent. in the Newcastle, and 42 per cent. in the country shopping districts.

## TRADE UNIONS.

The Trade Union Act of 1881-1936 provides for the registration of trade unions, the appointment of trustees, in whom the union property is vested, and for the constitution of rules. If union funds are used for political purposes, payments must be made from a separate fund, to which contribution by members is optional.

There are two classes of trade unions, *viz.*, unions of employers and unions of employees. The latter constitutes the bulk of the registered organisations.

After the introduction of the Commonwealth system of industrial arbitration in 1904 some of the unions previously on the State registry became merged into federal associations, but unless a union elects to be regulated exclusively under federal arbitration and conciliation the branch in New South Wales retains its registration under the Trade Union Act.

Statistics relating to the trade unions of employees in the State are shown in the following statement for various years since 1911. The figures exclude certain unions registered under federal law only:—

TABLE 693.—Trade Unions of Employees, 1911 to 1945.

Year.	Unions of Employees.	Members.			Receipts.	Expenditure.	Funds at end of Year.
		Males.	Females.	Total.			
					£	£	£
1911	179	145,784	4,743	150,527	157,202	146,757	112,494
1921	197	234,898	23,965	258,863	363,067	345,854	194,360
1927	170	306,380	38,689	345,069	487,723	454,190	357,588
1929	172	287,573	40,025	327,598	633,918	631,517	372,728
1932	170	241,127	39,718	280,845	330,167	316,931	336,574
1936	177	253,621	47,486	301,107	371,243	345,428	401,837
1937	179	267,568	50,833	318,401	412,429	384,397	428,666
1938	181	275,400	53,048	328,448	462,449	426,725	463,613
1939	184	278,049	53,889	331,938	534,190	492,862	453,799
1940	181	285,810	57,032	342,842	656,181	613,059	499,641
1941	184	326,551	78,704	405,255	648,625	580,380	562,333
1942	182	368,575	80,669	449,244	677,211	625,542	613,023
1943	187	366,829	95,979	462,808	773,613	708,574	677,391
1944	186	358,852	106,214	465,066	754,380	724,882	706,537
1945	182	368,793	96,689	465,482	786,256	745,605	734,922

At the end of the year 1945 there were 182 registered trade unions of employees. Membership in 1945 was the highest on record and 133,544 greater than in 1939, the gain comprising 90,744 males and 42,800 female members. Nearly all of the increase occurred in the four years to 1943, and since then the total has remained relatively steady. In 1945, however, 9,941 males were added and female membership decreased from the record number of 106,214 by 9,525 to 96,689.

Most of the unions have a small membership. In 1945 there were 30 unions of less than 100 members; 54 with 100 to 1,000 members; 51 with 1,000 to 5,000 members; 17 with 5,000 to 10,000; 11 with 10,000 to 20,000 members; and 3 unions with more than 20,000 members. In 1945 there were thus 14 unions with more than 10,000 members, compared with 6 such unions in 1940.

The receipts during 1945 amounted to £786,256, including contributions, £701,270. The total expenditure £745,605 included payments in respect of benefits £175,296, and management and other expenses, such as legal charges in connection with industrial awards, etc., £570,309. The total receipts and expenditure are liable to fluctuate under the influence of prevailing industrial conditions, the amounts being inflated in some years by the inclusion of donations for relief from one union to another. The funds at the end of the year include cash and freehold property and assets such as shares in Trades Halls and newspapers.

The following statement shows the membership, receipts, expenditure, and accumulated funds of trade unions of employees classified according to industry in the year 1945:—

TABLE 694.—Trade Unions of Employees—Members and Funds, 1945.

Industrial Classification.	Unions	Membership at end of Year.			Receipts.	Expenditure.	Funds at end Year.	Funds per Member
		Males.	Females.	Total.				
	No.	No.	No.	No.	£	£	£	s. d.
Banking and Insurance ...	3	7,262	1,655	8,917	6,611	10,894	7,602	17 1
Building ... ..	11	39,986	114	40,100	50,605	48,811	43,912	21 11
Clerical ... ..	6	7,352	6,750	14,102	15,349	13,899	4,098	5 10
Clothing ... ..	5	9,217	30,121	39,338	25,422	19,661	52,012	26 5
Commerce and Distribution ...	9	10,567	4,870	15,437	21,979	16,917	26,108	33 10
Engineering and Metalworking ...	13	88,854	6,235	95,089	203,661	189,161	167,352	35 2
Food, Drink and Narcotics ...	19	30,323	15,213	45,536	44,825	40,414	30,248	13 4
Government and Municipal Administration ...	13	33,028	8,375	41,403	51,915	50,736	81,584	39 5
Health Services ... ..	5	3,537	7,225	10,762	5,065	4,870	2,578	4 10
Manufacturing, n.e.l. ...	19	18,869	2,885	21,754	34,839	30,936	39,420	36 3
Mining and Smelting ... ..	15	18,367	3	18,370	114,148	105,019	119,464	130 1
Pastoral ... ..	3	15,318	1,704	17,022	23,167	21,369	8,091	9 6
Printing, Bookbinding, etc. ...	4	9,661	3,368	13,029	23,990	38,233	30,806	47 3
Railways and Tramways ...	13	47,531	1,850	49,381	80,880	76,473	46,419	18 10
Other Land Transport ... ..	2	11,840	608	12,448	26,443	28,454	893	1 5
Shipping and Sea Transport ...	12	5,929	30	5,959	21,742	20,944	9,462	31 9
Miscellaneous ... ..	14	11,152	5,683	16,835	26,878	21,101	45,060	53 6
Associations of Trade Unions ...	7	...	...	...	8,737	7,723	19,813	...
Total Unions of Employees	173*	368,793	96,689	465,482	786,256	745,605	734,922	31 7

\* Exclusive of nine Unions for which returns were not furnished.

### *Unions of Employers.*

Few unions of employers seek registration under the Trade Union Act, so that the available information concerning them is scanty and does not afford any indication of the extent of organisation amongst employers.

The unions of employers registered under the Trade Union Act at the end of 1945 numbered 24. The membership of 22 unions from which returns were received was 14,844 at the end of the year and the funds amounted to £96,435. The receipts during 1945 amounted to £67,013, and the expenditure to £51,531. The members included 8,410 in the pastoral industry, 3,006 retail tobacco traders and 907 master bakers.

Any seven or more employers who are members of a trade union and comply with the prescribed conditions as to rules, etc. may register under the Trade Union Act of New South Wales.

### INDUSTRIAL UNIONS.

Industrial unions of employees and of employers are registered under the industrial arbitration laws of the State of New South Wales and the Commonwealth as part of the administrative machinery of the arbitration systems.

*Industrial Unions registered in New South Wales.*

For the purpose of bringing an industry under the review of the State industrial tribunals in New South Wales, employees must be organised as a trade union under the Trade Union Act, and must obtain registration as an industrial union under the Industrial Arbitration Act. Registration for the purpose has been effected by practically all classes of employees throughout New South Wales, but employees in rural industries were removed from the operation of the State industrial arbitration system in December, 1929.

Registration as a union of employers may be granted to persons or groups of persons who have employed, on a monthly average, not less than fifty employees during the period of six months next preceding the date of application for registration. Prior registration under the Trade Union Act is not prescribed as in the case of unions of employees.

The Industrial Commission may cancel registration at its discretion, or upon the request of the union (unless an award or agreement relating to its members is in force, or if the union is accessory to an illegal lockout or strike).

At 30th April, 1946 there were 202 unions of employers and 153 unions of employees on the register. The numbers at 30th April, 1947 were 208 and 155, respectively.

*Industrial Unions registered by the Commonwealth.*

In the Commonwealth system of industrial arbitration, unions are registered in order to submit disputes to the industrial tribunals or to be represented in proceedings relating to disputes. Organisations of employees or employers representing at least 100 employees may be registered.

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## INDUSTRIAL ARBITRATION.

In New South Wales there are two systems of industrial arbitration for the adjustment of relations between employers and employees, viz.: the State system which operates under the law of the State within its territorial limits, and the Commonwealth system which applies to industrial disputes extending beyond the limits of the State. Important changes were made in the Commonwealth system in 1947, as described on page 778.

There is also a separate system of arbitration under Federal law to determine the industrial conditions of employment in the public service of the Commonwealth.

During the 1939-45 war the jurisdiction of the Commonwealth in industrial arbitration and conciliation was extended by regulations under the National Security Act as described on page 780. These Regulations were continued in force by the Defence (Transitional Provisions) Act, 1946.

### *Commonwealth-State Relations in Industrial Arbitration.*

The relation between the State and Commonwealth systems of industrial arbitration rests upon the distribution of legislative powers between the Commonwealth and the component States. The powers of the Commonwealth are those which the States have agreed to confer upon it and are defined in the Commonwealth of Australia Constitution Act; all residual powers remain with the States. In some matters the legislative power is exclusive to the Commonwealth, in others—including industrial arbitration—both Commonwealth and States have jurisdiction. The Commonwealth Constitution Act provides that if a State law is inconsistent with a valid Federal law the latter prevails and the State law becomes inoperative in so far as it is inconsistent. It has been held by the High Court that an award of the Commonwealth Court is a law within the meaning of this section, therefore awards of the Federal industrial tribunals override those made by State tribunals.

The Commonwealth jurisdiction is delimited by the Constitution Act to "conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State". In interpreting the law the High Court of Australia has decided that the Federal Parliament cannot empower an industrial tribunal to declare an award a "common rule" or industry-wide award to be observed by all persons engaged in the industry concerned. The Federal industrial tribunals must proceed by way of conciliation and arbitration between actual parties and cannot bind by award any person who is not a party to an interstate dispute, either personally or through a union.

Notwithstanding these limitations of the Commonwealth jurisdiction in industrial matters the Commonwealth system has gradually become predominant in the sphere of industrial arbitration throughout Australia. Its influence extended in the first place with the gradual adoption of the principle of federation in trade unionism and in political organisation, a

tendency which gathered force during the 1914-18 war period. As industry expanded over interstate borders, uniformity of industrial conditions was sought by employers, while employees were attracted to the Federal jurisdiction in the expectation of better terms as to wages, etc. than those awarded under State legislation. In many cases, also, the organisations concerned in a Federal award have taken action to have its terms embodied in State awards so that they become binding as a common rule in the industry. Again, for the sake of uniformity, legislatures of some States, notably New South Wales and Victoria, have adopted the Federal wage standards as the basis of State awards and agreements. In New South Wales, for instance, the basic wages determined by the Commonwealth Court of Conciliation and Arbitration have been adopted for State awards and agreements in substitution for those declared by the Industrial Commission (see page 792).

#### INDUSTRIAL ARBITRATION SYSTEM OF NEW SOUTH WALES.

##### *Industrial Tribunals.*

The principal tribunal is the Industrial Commission of New South Wales, which consists of six members with the same status as puisne judges of the Supreme Court. Subsidiary tribunals are conciliation committees for various industries, each consisting of an equal number of representatives of employers and employees in the industry concerned, together with a Conciliation Commissioner as chairman.

An amending Act of 1943 widened the definition of employee; provided that awards might cover wages and salaries up to £20 a week or £1,000 a year (formerly £15 a week and £750 a year); and applied the principle of preference in employment to persons who served in the 1939-45 war. It also included provisions for the more effective enforcement of the law in relation to arbitration, and gave added emphasis to conciliation in the settlement of disputes by requiring the appointment of five Conciliation Commissioners (three other than the Senior Conciliation Commissioner and the Apprenticeship Commissioner) for the term of seven years. In matters relating to apprenticeship in an industry the members of the Conciliation Committee with the Apprenticeship Commissioner constitute the Apprenticeship Council (see page 759).

Where an industrial dispute is threatened or has occurred, a Conciliation Commissioner may summon the parties to a compulsory conference in an endeavour to effect a settlement. Where agreement is reached by the parties to proceedings before a conciliation committee or a Conciliation Commissioner, the terms are embodied in an award from which appeal lies to the Industrial Commission. Matters upon which agreements are not effected are referred to the Industrial Commission.

Proceedings before a conciliation committee may be initiated upon the application of employers of not less than twenty employees or by an industrial union, and matters may be referred by the Minister or by the Industrial Commission. Awards are binding on all persons engaged in the industry as the tribunal directs and within the locality covered, until varied or rescinded.

Further particulars regarding the industrial tribunals are published in the chapter "Law Courts" of this volume.

*Industrial Agreements.*

Industrial unions and trade unions are empowered to make with employers written agreements, which when filed in the prescribed manner become binding between the parties and on all the members of the union concerned.

The maximum term for which an agreement may be made is five years, but it continues in force after the expiration of the specified term until varied or rescinded, or terminated, after notice by a party thereto. An industrial agreement may not provide for wages (except for apprentices or trainee apprentices) lower than the basic wages prescribed for the industry concerned, and upon any variation of the basic wages the rates of pay in an agreement may be adjusted accordingly by the Industrial Registrar upon application by any party to the agreement.

*Number of Industrial Awards and Agreements.*

The number of awards made and agreements filed by the State industrial tribunal during each of the five years 1942 to 1946 is shown below:—

TABLE 695.—State Industrial Awards and Agreements, 1942 to 1946.

Year ended 30th June.	Awards Published.		Agreements Filed.	In Force at end of Year.	
	Principal.	Subsidiary.		Awards.	Agreements.
1942 ... ..	73	1,278	25	629	166
1943 ... ..	24	1,157	11	637	163
1944 ... ..	36	539	15	643	166
1945 ... ..	40	664	19	661	172
1946 ... ..	66	1,119	21	676	179

The subsidiary awards include a large number made by the Industrial Registrar in consequence of variations in the basic wage.

Complaints regarding breaches of awards and industrial agreements are investigated by officers of the Labour and Industry Department, who may direct prosecutions. Proceedings may be taken also by employers and by the secretaries of industrial unions, and the cases are dealt with by the Industrial Registrar or the industrial magistrates.

## THE COMMONWEALTH SYSTEM OF INDUSTRIAL ARBITRATION.

The main authorities are the Commonwealth Court of Conciliation and Arbitration, which began to function in 1905, consisting of a Chief Judge and other judges appointed by the Governor-General, with life tenure, and a Chief and other Conciliation Commissioners. The Conciliation Commissioners, appointed by the Governor-General, hold office until the age of 65 years. Conciliation Commissioners may be assigned to a particular industry or group of industries by the Chief Judge; otherwise the work of the Commissioners is organised and allocated by the Chief Conciliation Commissioner. Each judge and each Conciliation Commissioner is charged with the duty of endeavouring to reconcile the parties in industrial disputes, and for the purpose may convene compulsory conferences.

The respective powers and functions of the Judges and the Conciliation Commissioners underwent important changes under the Commonwealth Conciliation and Arbitration Act, 1947, proclaimed on 10th October, 1947.



The Commissioners were given wide powers to go to the cause of impending or existing industrial trouble in endeavours to remove the cause of the trouble by conciliating the disputants. A Commissioner may act on his own volition and must act upon advice of a dispute or impending dispute from an employer or from a Minister to him or to the Registrar.

Failing success by conciliation, and only then, and without further formalities, the Commissioner acts in an arbitral capacity to prevent or settle the dispute by making an award. An award or order of a Conciliation Commissioner may not be challenged or questioned, or be subject to prohibition, mandamus, or injunction in any Court whatsoever.

The Act reserves it to the Court to prescribe (a) standard hours of work in industry, (b) the basic wage or principles on which it is computed, (c) the period which shall be granted as annual leave with pay, and (d) the minimum rate of remuneration for adult females in industry. Matters which would result in the alteration of standard hours or of the basic wage or the principles on which it is computed (see page 795) are determined by the Chief Judge and at least two other judges. In all other respects the Conciliation Commissioners have power to determine the rates of wages and the conditions of employment in industry.

The Court or a Conciliation Commissioner may refer matters of dispute to a Local Industrial Board, consisting of a State industrial authority or a board constituted by the Court or a Commissioner, consisting of representatives of employers and employees in equal number and an independent chairman, for report, and may delegate to the Board all or such of its or his powers as are deemed necessary to enable the Board to settle the dispute by amicable agreement.

Provision may be made in any award for the appointment of a Board of Reference to deal with matters arising under its terms. Such boards serve a useful purpose in implementing awards and in removing causes of friction between employers and their employees.

A special authority, the Stevedoring Industry Commission, was provided under the Commonwealth Stevedoring Industry Act, 1947 (not proclaimed in that year) to continue the regulation of industrial relations in the stevedoring industry then exercised under National Security Regulations. Particulars of the war-time provisions and of the new legislation are given on page 780 of this volume.

A Joint Coal Board and a Coal Industry Tribunal, appointed jointly by the Commonwealth and New South Wales Governments, govern industrial matters in respect of the coal-mining industry in this State under Coal Industry Acts of 1946, as described on page 678.

The industries subject to federal awards and agreements include coal-mining, shipping, pastoral industries, shipbuilding, timber trades, clothing factories, breweries, glass works and rubber works, metal and printing trades, railway and tramway employees, journalists, and engine drivers.

#### CROWN EMPLOYEES AND ARBITRATION.

Under the State industrial arbitration system, employees of the Government of New South Wales and of governmental agencies, with the exception of the police, have access to the ordinary industrial tribunals for the regulation of certain conditions of employment, viz., wages, rates for overtime, holidays and other special work; preference to unionists, and deductions for board and residence. There is a Crown Employees' Appeal Board

to hear and determine appeals in specified matters affecting individual employees not in the Special Division and whose salary does not exceed £1,000 per annum.

For the public service of the Commonwealth, rates of pay and conditions of employment are regulated by a special tribunal constituted by an arbitrator appointed by the Governor-General. Decisions of the arbitrator may be disallowed by a resolution of either House of the Federal Parliament.

The Commonwealth Court of Conciliation and Arbitration may make awards in respect of employees of the State Government.

#### WAR-TIME REGULATIONS—INDUSTRIAL ARBITRATION.

War-time regulations were promulgated by the Commonwealth in terms of the National Security Act, 1939 to extend the jurisdiction and powers of Federal industrial tribunals during the period of the war, so that action for the prevention and settlement of industrial disputes might be taken more expeditiously. All industrial disputes, including those not extending beyond the limits of one State, were brought within jurisdiction of Commonwealth tribunals, and Federal awards might be applied as common rules or industry-wide awards.

The Regulations increased the number of Commonwealth Conciliation Commissioners, extended their powers for the preservation of peace in industry, and provided for the appointment of conciliation officers to exercise similar functions, subject to the direction of the Federal Attorney-General or Minister for Labour and National Service.

<sup>101</sup> Tribunals set up for the organisation of certain industries were empowered to regulate conditions of employment.

In the coalmining industry, central and local reference boards were constituted to deal with matters in dispute, and extensive powers were conferred on industrial authorities for the prevention of stoppages of work.

The Maritime Industry Commission (continuing to function under war-time regulations extended under Defence (Transitional Provisions) Acts of 1946 and 1947) is authorised to regulate the manning of Australian merchant ships and to safeguard the conditions of persons serving therein. Orders of the Commission over-ride awards of State or Commonwealth industrial tribunals. The Stevedoring Commission makes orders relating to the employment of waterside workers, and may appoint a Waterside Employment Committee in respect of any port to exercise such functions as the Commission assigns to it.

Conditions of employment and the engagement of workers in the production of munitions and other war supplies were subject to National Security Regulations. Employers concerned were not permitted to pay such workers higher or lower rates of wages nor to observe more favourable conditions of employment than those prescribed.

A Board was established under National Security (Employment of Women) Regulations to deal with applications for the employment of women on work customarily done by men and to determine rates of wages, hours, etc. for such employment, but this Board was dissolved in October, 1944, and a permanent judge of the Commonwealth Arbitration Court assumed its functions (see page 745).

## HOURS OF WORK.

With the development of the industrial arbitration system the working hours in organised trades and callings have become subject to awards and agreements.

Special legislation has been enacted in New South Wales from time to time for the direction of the industrial tribunals in regulating hours of work. Thus the Eight Hours Act of 1916 prescribed a standard working week of 48 hours. In 1920 the 44-hours week was proclaimed in many industries on the recommendation of a special court, but in September, 1922 the Court of Industrial Arbitration restored the 48-hours week in most of the cases in which the working time had been reduced. From 4th January, 1926 the 44-hours week again became the standard, although in the latter half of the year 1930 the hours were 48 per week.

At the end of the year 1932 the Industrial Commission was charged with the duty of determining, after public inquiry, the standard hours for industries within its jurisdiction. After public inquiry in June, 1933 the Industrial Commission announced its decision to declare 44 hours per week as the standard applicable to industry generally, to be applied with a degree of elasticity—as under former statutes—in order to meet the varying needs of different industries.

A standard 40-hours week was introduced under the (State) Industrial Arbitration (Forty Hours Week) Act, 1947 as from 1st July, 1947, and in respect of workers under Commonwealth awards as from 1st January, 1948 in accordance with a judgment of the Commonwealth Court of Conciliation and Arbitration given on 8th September, 1947.

The New South Wales Act prescribes as maximum working time 8 hours during any consecutive 24 hours, 40 hours per week, or, in periods of 14, 21 and 28 consecutive days, of 80, 120 and 160 hours, respectively. A measure of elasticity in working the 40-hours week is afforded by permitting the 8 hours in a day to be exceeded if a working week of less than six days is observed, or less than 8 hours are worked on other days of the week under an award or agreement.

The Commonwealth Court's decision applies to workers in industries in which standard hours were not expressly fixed and those in which the standard hours were 44; in industries in which hours exceeded 44 a reduction in hours on the basis of the judgment might be sought of and granted by a Judge or the Conciliation Commissioner concerned, by whom also the hours and days during which the work should be performed would be determined.

Overtime may be permitted under certain conditions or it may be prohibited or restricted for the purpose of relieving unemployment by distributing the work available.

The hours of work in factories and shops are restricted in a general way by provisions of the Factories and Shops Act which prohibit the employment of youths under 16 years of age and of women for more than 44 hours in any week, though overtime not exceeding 3 hours in any day is allowed on 24 days in a year, or by written permission of the Minister, where necessary to meet the exigencies of trade, on 48 days.

Ordinarily the closing times of shops in shopping districts are the hours fixed by the industrial awards and agreements for the cessation of work by the employees. It was prescribed by National Security Regulations

issued on 16th December, 1941 that shops, with certain exceptions, must close not later than 6 p.m., and consequently a former practice of opening shops until 8.30 p.m. on Fridays was discontinued.

The Factories and Shops (Amendment) Act, 1943 precludes a return of the late shopping night. In most classes of shops the closing hour is 5.30 p.m. in the Metropolitan district and 5 p.m. in Newcastle from Monday to Friday, and there is a half-holiday from noon on Saturday. In some country centres the weekly half-holiday is observed on Wednesday instead of Saturday.

The closing times for various classes of shops in the Metropolitan and Newcastle and Country shopping districts are shown below:—

TABLE 696.—Shops—Closing Times in Shopping Districts, N.S.W.

Class of Shop.	District.	Closing Time.		
		Monday to Thursday.	Friday.	Saturday.
		p.m.	p.m.	p.m.
Farriers ... ..	All districts ...	5 0	5 0	...
Motor vehicle shops ... ..	Metropolitan	5 10	5 20	Noon.
	Newcastle ...	5 0	5 0	Noon.
	Country ...	5 30	6 0	1 0
Grocers, Drapers, Ironmongers, Radio, Jewellery, Fur, Millinery, Boot, Furniture, Secondhand, Curio, Antique, Glassware, Crockery, Photographic Goods, etc. ...	Metropolitan	5 30	5 30	Noon.
	Newcastle ...	5 0	5 0	Noon.
	Country ...	5 0	6 0	1 0
Hairdressers' Saloons, Male ... ..	All districts ...	6 0	6 0	12 30
Female ... ..	" ...	6 0	6 0	1 0
Hairdressers' Shops ... ..	" ...	6 0	6 0	1 0
Tobacconists ... ..	" ...	11 30	11 30	11 30
Chemists ... ..	Metropolitan	7 0	7 0	12 30*
	Newcastle and Country ...	7 0	7 0	1 0*
Newsagencies ... ..	Metropolitan	7 0	7 0	7 0
	Newcastle ...	8 0	9 0	8 0
	Country ...	9 0	9 0	9 0
Flower Shops ... ..	All districts ...	8 30	9 30	9 30
Fruit and Vegetable Shops ... ..	Metropolitan	7 30	8 30	7 30
	Newcastle and Country ...	11 30	11 30	11 30
Fish, Cakes and Pastry, Cooked Provisions, Confectionery, Soft Drinks, Milk Bars, etc. ... ..	All districts ...	11 30	11 30	11 30
Restaurants, Grill Rooms, Fish Cafes, etc. ... ..	" ...	Midnight	Midnight	Midnight
Petrol. Oil and Accessories ... ..	" ...	6 0	6 0	1 0†

\* May re-open from 6.30 p.m. to 7.45 p.m. † May open till noon on Sundays.

The ordinary hours of work per shift in the coal-mines as fixed by an industrial award dating from 1st January, 1917 were eight hours bank to bank, inclusive of one half-hour for meal time, on Monday to Friday and six hours bank to bank, inclusive of one half-hour for meal time, on Saturday, Sunday and holidays. The usual number of shifts was eleven per fortnight though in many collieries there was no work in winning coal on Saturdays.

In 1939 the Commonwealth Court of Conciliation and Arbitration reduced the maximum hours in coal mines of underground ("from face to waggon") workers to 40 per week, worked in shifts of eight hours, including one half-hour per shift for meal time counted as time worked, Monday to Friday inclusive. The ordinary hours of surface workers were fixed at 86 per fortnight in shifts of eight hours, and one Saturday shift of six hours including crib time (30 minutes) in all shifts counted as time worked. The hours of underground workers in coal mines are reckoned from the time the first person working on a shift leaves the surface to the time the last man on the same shift returns to the surface.

Hours in the maritime industry are fixed by the Maritime Industry Commission, constituted under National Security Regulations, continued in operation by the Defence (Transitional Provisions) Act, 1946 and 1947.

The following statement compiled by the Commonwealth Statistician for each State of the Commonwealth shows the average number of hours in a full working week (without overtime) for adult male workers in industrial occupations, except shipping and rural industries:—

TABLE 697.—Hours of Work per Week in Australian States, 1914 to 1946 (Adult Male Workers).

End of Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
1914 (April)	49.42	48.80	48.78	48.60	47.78	48.62	48.93
1916...	48.51	48.22	48.27	48.14	48.11	48.55	48.33
1921...	45.66	46.95	45.52	47.07	46.24	46.84	46.22
1925...	46.76	46.98	43.88	46.97	46.26	47.25	46.44
1926...	44.55	46.94	43.95	46.95	45.80	47.27	45.57
1929...	44.14	46.83	43.96	46.83	45.58	47.09	45.34
1930...	45.64	46.85	44.43	46.83	45.55	47.09	45.98
1931...	44.22	46.88	44.98	46.83	45.55	46.76	45.51
1936...	44.08	46.41	43.69	46.55	45.30	46.33	45.09
1937...	44.07	46.22	43.68	46.57	45.25	46.24	45.03
1938...	44.01	45.85	43.67	46.31	45.11	46.00	44.85
1939...	43.92	44.61	43.46	45.83	45.10	45.33	44.35
1940...	43.70	44.28	43.46	45.23	44.09	44.92	44.04
1941...	43.68	44.12	43.43	44.49	43.13	44.42	43.83
1942...	43.52	43.94	43.32	44.25	43.11	43.51	43.65
1943...	43.52	43.94	43.18	44.21	43.11	43.37	43.62
1944...	43.50	43.91	43.18	44.21	43.16	43.39	43.61
1945...	43.50	43.91	43.18	44.07	43.15	43.38	43.59
1946...	43.50	43.82	43.18	44.07	43.15	43.38	43.57

Between April, 1914 and December, 1929 the average nominal working week for adult males in New South Wales was reduced by 5½ hours to 44.1 hours per week. Then an amendment of the State law, as quoted above, caused a temporary increase of 1½ hours. The average has since declined below 44 hours and is less than in Victoria and South Australia but greater than in Queensland, Western Australia and Tasmania.

#### PUBLIC HOLIDAYS.

Certain days are observed as public holidays, on which work is suspended as far as practicable. In continuous processes and in transport and other services where the employees work on holidays, they receive recreation leave in lieu thereof, and in some cases extra wages for the time worked.

The days which are observed generally throughout the State as public holidays are as follows:—1st January (New Year's Day), 26th January (the Anniversary of the first settlement in Australia), Good Friday, Easter Monday, 25th April (Anzac Day), Christmas Day, 26th December (Boxing Day), and the King's Birthday.

If a public holiday falls upon a Sunday, or if Boxing Day falls upon a Monday, the following day is usually a holiday. The birthday of King George VI is 14th December and the holiday is observed on the second or third Monday in June, so that it does not occur in the busy week preceding the Christmas holidays. Anniversary Day is usually observed on a Monday.

In addition to the days listed above, the day after Good Friday and the first Monday in August are bank holidays, observed in respect of banks and many other financial institutions and public offices.

The Governor may appoint by proclamation a special day to be observed as a public holiday throughout the State, or any part of the State. It is customary in certain districts to proclaim a day in each year as Eight Hour Day. In the county of Cumberland the first Monday in October is Eight Hour Day.

During the war public holidays and annual leave were made subject to National Security Regulations from 16th December, 1941. In 1942 the day after Good Friday was observed as a public holiday and the holiday on Easter Monday was cancelled.

#### ANNUAL HOLIDAYS WITH PAY.

In New South Wales an annual holiday with full pay has for long been customary in some classes of employment, e.g., governmental services, banking and insurance, and in many commercial and industrial occupations. The High Court of Australia decided in 1912 that the Commonwealth Court of Conciliation and Industrial Arbitration had jurisdiction to award holidays with pay and a number of current Federal awards contain provision for annual leave with pay; the period is usually from one to two weeks.

In 1915 the Court of Industrial Arbitration in New South Wales decided, upon appeal, that an industrial board in a proper case might grant a claim for annual holidays. The Annual Holidays Act, passed by the State Government in December, 1944, entitles every worker, including rural and domestic workers and those not covered by awards (but excluding workers under Federal awards) to two weeks' holiday on full ordinary pay after twelve months' continuous service. The holidays must be taken within six months of becoming due (unless in exceptional circumstances the Industrial Registrar otherwise approves) in two consecutive weeks, or by arrangement between employer and employee, in two separate periods, but not otherwise. Employers may not pay, and workers may not accept, money in lieu of holidays, and the worker must be given a week's notice of, and be paid in advance for, the holiday period. Should employment endure less than twelve months, the worker must be paid holiday pay when his employment is terminated in an amount equal to one-twenty-fifth of ordinary pay for the period of employment. Subsisting rights to holidays conferred otherwise than under the Act are preserved where such rights are *more* favourable to the worker than those which the Act provides.

## PREFERENCE TO UNIONISTS.

The laws relating to industrial arbitration confer upon both State and Federal industrial tribunals the authority to embody the principle of preference to unionists in their awards, etc., but this may not operate to prevent the employment of discharged Service men and women to whom preference in employment is given under the Re-establishment and Employment Act, 1945.

The State industrial tribunals may prescribe by award that, as between members of a specified union and other persons offering or desiring employment at the same time, preference of employment be given to members of the union, other things being equal. It is a general rule to grant preference to a union which substantially represents the trade concerned.

The Commonwealth Court is authorised to grant preference to members of registered organisations, but in the exercise of the authority the Court adheres to the general principle that only in case of strong necessity should there be any interference with the employer's discretion in choosing his employees. Consequently it has been the usual practice to refuse to order preference if the respondents undertake not to discriminate against unionists. In 1932, however, preference was awarded in respect of women and girls in clothing factories with the object of preventing the exploitation of labour of this class.

## INDUSTRIAL DISLOCATIONS CONTINGENT UPON DISPUTES.

Records relating to industrial disputes in all classes of industry in New South Wales are kept by the Department of Labour and Industry. In the compilation of statistical tables relating thereto, it is the rule of the Department in counting the number of disputes that one dispute is recorded if a section of employees in an industry ceases work and the dispute extends subsequently to other employees in that industry in the same or in other localities. On the other hand, if employees in other industries cease work in sympathy with the militant unions, the sympathy strikes are counted as another dispute, that is, in addition to the original dispute.

In the coal-mining industry, when the action of one section of the employees has caused a complete cessation of the operations of the mine, the number counted is the full complement of the mine. Where a section has ceased work and the operations of the mine have continued, only those who ceased work have been included as workers involved.

In calculating the duration, only actual working days, viz., days on which work would be performed ordinarily, have been counted, but no allowance is made for intermittency of employment, and it has been assumed that if the dispute had not occurred work would have been continuous during the period of its currency. Consequently the figures are inflated in such industries as coal mining, where there has been considerable intermittency due to causes other than disputes.

The following statement shows, so far as can be ascertained, the number of workers involved, and, subject to the remarks above with respect to intermittency, the time lost in industrial disputes in each of the last ten years. Particulars are shown separately regarding disputes which originated during the year specified, and those which commenced at an earlier date. Corresponding information in respect of the years 1929 to 1936 is given in Table 488 of the 1940-41 edition of the Year Book.

TABLE 698.—Industrial Disputes, 1937 to 1946.

Year.	Disputes.			Workers Involved.			Duration—Working Days.		
	An- terior.	New.	Total.	An- terior.	New.	Total.	An- terior.	New.	Total.
1937 ...	1	511	512	360	183,848	184,208	1,080	545,668	546,748
1938 ...	1	480	481	269	182,961	183,230	22,327	916,939	939,266
1939 ...	1	532	533	50	211,565	211,615	850	445,633	446,483
1940 ...	2	434	436	253	227,252	227,505	1,596	1,074,118	1,075,714
1941 ...	2	766	768	1,755	342,722	344,477	22,165	889,870	912,035
1942 ...	1	667	668	169	193,221	193,390	169	417,566	417,729
1943 ...	5	812	817	1,037	355,597	356,634	10,710	903,536	914,246
1944 ...	3	994	997	291	312,211	312,502	1,566	732,425	733,991
1945 ...	...	1,158	1,158	...	324,491	324,491	...	1,878,753	1,878,753
1946 ...	3	983	986	960	262,195	263,155	17,020	898,731	915,751

A classification of the disputes according to mining and non-mining industries reveals the fact that disputes leading to a suspension of work occur more frequently and are more extensive in the mining industry than in any other. Moreover, the time lost in coal-mining, as a general rule, exceeds the aggregate loss in other industries. In calculating the duration of the dislocations, however, allowance is not made for intermittency, and it is probable that there is considerable over-statement arising from this and other factors.

In analysing statistics of industrial disputes, especially in comparing them with those of other countries, careful consideration should be given to the method of computation and the definition of terms, as shown on the preceding page, because the practices vary greatly in different countries.

The following statement shows the particulars of the disputes in mining and in other industries which commenced in each of the last ten years. The working days during each dispute have been assigned to the year in which the cessation of work occurred, and for this reason the figures differ from those in the previous table (and those published by the Commonwealth Statistician), which show the working days lost in the year specified, irrespective of the year in which disputes originated.

TABLE 699.—Industrial Disputes According to Year of Commencement, 1929 to 1946.

Year.	Disputes.			Workers Involved.			Duration—Working Days.		
	Mining.	Non- mining.	Total.	Mining.	Non- mining.	Total.	Mining.	Non- mining.	Total.
1929 ...	300	30	330	94,692	5,981	100,676	3,689,891	746,486	4,436,377
1937 ...	417	94	511	145,167	38,681	183,848	315,333	252,662	567,995
1938 ...	423	57	480	170,541	12,420	182,961	726,014	191,775	917,789
1939 ...	497	35	532	202,621	8,944	211,565	382,458	64,771	447,229
1940 ...	385	49	434	206,022	21,230	227,252	977,744	118,539	1,096,283
1941 ...	618	148	766	219,715	123,007	342,722	410,213	479,826	890,039
1942 ...	540	127	667	139,501	53,720	193,221	228,129	200,141	428,270
1943 ...	668	144	812	181,863	173,734	355,597	344,822	560,280	905,102
1944 ...	780	214	994	205,660	106,551	312,211	450,165	282,260	732,425
1945 ...	945	213	1,158	222,344	102,147	324,491	653,264	1,215,499	1,868,763
1946 ...	878	105	983	180,852	81,343	262,195	299,570	992,301	1,291,871



Disputes which originated in 1929 involved 100,676 workers and caused the loss of 4,436,377 working days, of which 3,689,891 days were in respect of 94,692 mine workers. In seven of the eleven years from 1930 to 1940 the loss from originating disputes was less than 500,000 working days, but in 1940 the loss reached 1,096,283 working days, mainly due to unrest in the coal-mining industry.

The disputes which arose in 1945 included protracted stoppages in the iron and steel and coal-mining industries and caused the loss of a total of 1,899,763 working days, 54 per cent. of which were occasioned by sympathy stoppages. In 1946, in the mining industry, most disputes were short-lived and the loss in working days was, with the exception of 1942, the least in the last ten years. However, disputes which began in a chemical industry and in a Sydney dockyard in October, 1946 continued for 207 and 114 days, respectively, and with another, involving 6,000 workers in Sydney and Newcastle which began in November and had a duration of 64 days, accounted for 623,000 of the 992,301 working days lost in the non-mining industries.

Information is given in the following table regarding the duration of the disputes which originated during the years 1942 to 1946:—

TABLE 700.—Industrial Disputes—Duration, 1942 to 1946.

Duration in Working Days.	Year ended Dec.	Mining.			Non-Mining.			All Industries.		
		Dis-putes.	Workers Involved.	Working Days Lost.	Dis-putes.	Workers Involved.	Working Days Lost.	Dis-putes.	Workers Involved.	Working Days Lost.
Under one ...	1942	31	4,226	2,131	11	11,835	5,201	42	16,061	7,332
	1943	67	9,965	3,696	14	7,176	2,836	81	17,441	6,532
	1944	75	12,521	2,815	37	15,440	6,662	112	27,970	9,477
	1945	27	6,674	3,536	26	6,323	1,770	53	12,997	5,306
	1946	44	5,804	2,989	1	3,500	1,750	45	9,304	4,739
One ...	1942	367	94,544	94,474	34	12,727	12,727	401	107,271	107,201
	1943	409	112,488	112,422	42	112,703	112,703	451	225,191	225,125
	1944	478	123,928	123,768	64	47,916	47,931	542	171,844	171,699
	1945	523	120,441	120,441	55	29,980	29,980	578	150,421	150,421
	1946	623	129,048	129,048	35	42,060	42,060	658	171,108	171,108
Over 1 to 10...	1942	137	39,911	119,800	71	22,110	71,104	208	62,021	190,904
	1943	177	56,645	170,334	73	40,530	185,431	250	97,175	355,765
	1944	216	63,511	214,106	97	37,523	140,072	313	101,034	354,178
	1945	361	87,670	340,093	80	45,118	195,271	441	132,788	535,364
	1946	204	44,125	136,441	40	17,116	113,006	244	61,241	249,447
Over 10 to 50	1942	5	820	11,724	11	7,048	111,109	16	7,868	122,833
	1943	15	2,765	58,370	12	12,139	209,218	27	14,904	267,588
	1944	11	5,700	109,476	16	5,663	87,595	27	11,363	197,071
	1945	30	5,658	94,562	40	16,059	558,610	70	21,717	653,172
	1946	7	1,875	31,092	16	9,477	142,552	23	11,352	173,644
Over 50 to 100	1943	...	...	...	1	850	44,200	1	850	44,200
	1945	4	1,909	94,632	10	3,977	374,768	14	5,886	469,400
	1946	...	...	...	7	1,276	431,990	7	7,376	431,990
Over 100 ...	1943	...	...	...	2	36	5,892	2	36	5,892
	1945	...	...	...	2	690	85,100	2	690	85,100
	1946	...	...	...	6	1,814	260,943	6	1,814	260,943
Total	1942	540	139,501	228,129	127	53,720	200,141	667	193,221	428,270
	1943	668	181,863	344,822	144	173,734	560,280	812	355,597	905,102
	1944	780	205,660	450,165	214	106,551	282,260	994	312,211	732,425
	1945	945	222,344	653,264	213	102,147	1,245,499	1,158	324,491	1,898,763
	1946	878	180,852	299,570	105	81,343	992,301	983	262,195	1,291,871

The foregoing table indicates that although the majority of disputes do not endure for more than a week or two many of these involve workers in considerable numbers and the resultant loss of working time is very considerable; thus, of the time lost in disputes that originated in 1945 and 1946 about 28 per cent. and about 33 per cent., respectively, was in disputes which lasted for periods up to ten days. Of the disputes which began in 1945, those of a duration of over ten and up to fifty days were more numerous and caused a much greater loss in working days (653,172 days or over 50 per cent. of the total) than usual. For that year and for 1946 the long-enduring disputes (over fifty days) which arose accounted respectively for 29 per cent. and 49 per cent. of all working days lost. The records show that in the mining industry there were only four disputes in the years 1942 to 1946 which had a duration exceeding fifty days.

The causes, and the working days lost in respect of each cause, of the disputes which commenced in the years 1942 to 1946, distinguishing disputes in the mining industries and in the non-mining group are shown in the following statement. Disputes regarding the employment of non-union labour are included in the category "employment of persons, etc.". Those pertaining to the recognition of a union and the enforcement of union rules are classified under the head of "trade unionism".

TABLE 701.—Industrial Disputes—Causes—Working Days Lost, 1942 to 1946.

Disputes Commenced in Year.	Wages.	Hours.	Working Con- ditions.	Employ- ment of Persons or Classes of Persons.	Trade Union- ism.	Sym- pathy.	Miscell- aneous.	Not Stated.	Total, All Causes.
MINING INDUSTRY.									
1942 ...	47,135	6,672	63,618	72,155	3,048	12,767	18,957	3,777	228,129
1943 ...	104,782	6,907	93,395	49,153	1,584	40,434	45,584	2,983	344,822
1944 ...	76,797	5,754	152,109	59,045	10,089	82,612	60,186	3,573	450,165
1945 ...	78,477	3,155	136,250	62,317	16,110	289,001	55,042	12,912	653,264
1946 ...	49,720	1,212	110,217	53,735	15,119	7,037	49,017	13,513	299,570
INDUSTRIES OTHER THAN MINING.									
1942 ...	118,578	1,436	29,284	33,415	4,700	7,824	4,204	500	200,141
1943 ...	46,450	125,799	133,091	226,263	6,251	3,960	7,421	11,045	560,280
1944 ...	54,169	39,699	93,076	56,574	84	8,497	29,370	791	282,280
1945 ...	109,567	116,806	47,852	142,679	15,713	746,647	56,688	9,547	1,245,499
1946 ...	657,093	57,990	91,876	124,160	676	43,071	16,835	...	992,301
ALL INDUSTRIES.									
1942 ...	165,713	8,108	92,902	105,770	7,748	20,591	23,161	4,277	428,270
1943 ...	151,232	132,700	226,486	275,416	7,835	44,394	53,005	14,028	905,102
1944 ...	130,966	45,453	245,185	115,619	10,173	91,109	89,556	4,364	732,425
1945 ...	188,044	119,961	184,102	204,996	31,823	1,035,648	111,730	22,459	1,898,763
1946 ...	706,813	59,202	202,093	177,895	15,795	50,708	65,852	13,513	1,291,871

A review of the disputes which arose in the five years ended 1946 according to causes shows that the loss of working time was greatest in respect of disputes concerning wages (25.6 per cent. of the total), closely followed by stoppages in sympathy with other disputants (23.6 per cent.), with those regarding working conditions (18.1 per cent.) and the employment of persons or classes of persons (16.7 per cent.) next in order of magnitude; the loss in disputes classified to all causes other than the foregoing was

16 per cent. of the total. In this period the order of importance of disputes by causes (measured in working days lost) in the mining industry was working conditions, sympathy and wages. In industries other than mining the order was wages, sympathy and employment of persons or classes of persons.

Stoppages in sympathy with other disputants were the predominant cause of loss of man working days in respect of the disputes which arose in 1945, and represented about 44 per cent. of the total in the mining industry and about 60 per cent. in non-mining industries.

Of the working days lost in disputes which originated in 1946, those regarding wages and working conditions accounted for approximately 54 per cent. in the mining industry and over 75 per cent. in all other industries. Days lost in disputes about the employment of persons or classes of persons resulted in about 17 per cent. and 12 per cent. of the days lost in the respective industry groups in that year.

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## WAGES.

Wages paid to industrial workers in New South Wales are regulated for the most part by the industrial arbitration tribunals and special authorities described in the preceding chapter.

### WAR-TIME CONTROL OF WAGES.

Rates of wages payable to skilled workers employed in the production of munitions were prescribed by Regulations issued on 5th July, 1940 and later, and wages at higher or lower rates might not be paid to them. Provision was made, however, for extra remuneration in the nature of merit money, allowances for special ability, etc., under conditions prescribed by the Regulations. The rates of wages were expressed as margins above the basic wage for a week of 44 hours or as hourly rates and a special allowance or "war loading" was added.

In a number of industries war loading was added by industrial tribunals for occupations affected by special circumstances arising from the war, such as greater skill or responsibility or the need for greater effort or more intensive work. The war loadings continue to be paid; those added to wages of adult males range from 3s. to 8s. per week.

To encourage and regulate the employment of women for the purpose of prosecuting the war the Commonwealth Government enacted the Women's Employment Act, 1942, which came into operation on 6th October, 1942. The Act incorporated as the Women's Employment Regulations, the National Security (Employment of Women) Regulations (first promulgated on 2nd March, 1942) as amended to 10th September, 1942, and provided that women employed during the war emergency on work customarily performed by men were to be paid rates of wages assessed by the Women's Employment Board on the basis of efficiency and other special factors likely to affect the productivity of their work. The rates might not be less than 60 per cent., and in the majority of cases ranged between 75 and 90 per cent., of rates payable to males for similar work.

The Women's Employment Board was disbanded in October, 1944, and its powers and functions then devolved upon a judge of the Commonwealth Court of Conciliation and Arbitration.

National Security (Female Minimum Rates) Regulations, made on 19th July, 1944, were designed to facilitate transference of females from work in which they were normally engaged to work deemed more essential during the war. Under these regulations any industry might be declared a "vital industry". In industries so declared and in which the minimum rates of pay for females might be considered unreasonably low in comparison with other war industries, the Commonwealth Court, on reference by the Minister, might determine new minimum rates for specific periods (but not extending beyond six months after termination of the war). Industries declared under these regulations included textiles, knitting, hosiery, many food processing industries, aircraft manufacture and assembly, munitions, motor coach assembly and domestic staffs of hospitals, etc.. In these industries women might be paid not less than 75 per cent. of the minimum rates for males working under the same award, not taking into account margins for skill.

General provision for the stabilisation of wages at rates current on 10th February, 1942 was contained in the National Security (Economic Organisation) Regulations described on page 290 of this volume. Wages might not be altered except by industrial authorities upon applications lodged prior to 10th February, 1942, or, with Ministerial approval, to correct anomalies, or with the approval of the industrial authorities, where there were changed circumstances of employment. The Order did not preclude basic wage adjustments consequent on variations in the cost of living, increases on promotion to higher position or upon completion of a period of probation, advancement under scale of periodic increments or payment of bonuses in accordance with conditions current at 10th February, 1942.

This "wage pegging" continued throughout the war years. The first step in relaxation was taken on 28th March, 1946, when authority was given the Commonwealth Court of Conciliation and Arbitration under the regulations to vary standard hours and the basic wage or the principles upon which it was determined. Under this authority an interim judgment, prescribing an increase of 7s. per week in the basic wage, was given on 13th December, 1946.

In December, 1946 the regulations were amended to permit industrial authorities to raise wages in certain circumstances without prior approval of the Chief Judge of the Court (or the Chairman of the Joint Coal Board, where applicable) within limits set out in a "formula". The effect was to allow for males marginal rates up to 25 per cent. above those ruling in September, 1939, and to prescribe for female workers a maximum rate equivalent to 75 per cent. of the male rate, a ratio which previously had been payable only to those whose wages were controlled by the Women's Employment Board and females in industries defined as "vital". At the same time, industrial authorities were empowered to adjust marginal rates, having regard to ruling margins in other occupations, and also to adjust piece, penalty and shift rates.

As from 9th April, 1947 all industrial authorities were permitted to alter rates of remuneration in any type of case provided it was first certified by the Chief Judge or the Chairman of the Joint Coal Board that an alteration was not opposed to the national interest.

Simultaneously with the proclamation of the Commonwealth Conciliation and Arbitration Act, 1947 in October, 1947 and the appointment of sixteen Conciliation Commissioners thereunder, the Industrial Provisions (Part V) of the National Security (Economic Organisation) Regulations were repealed. New regulations then made make award rates the maximum as well as the minimum rates, and permit variation of rates by "consent awards" only if an industrial authority, after reviewing all the circumstances, is satisfied the proposed alteration does not prejudice the national interest. In all other respects complete freedom was restored to all industrial authorities to regulate wages, hours and conditions of employment within their jurisdictions.

Where for special skill or other reasons individual employees were lawfully being paid margins above the award rates, payment at the higher rates may continue; variations in systems of payment by results under bonus, piece work, or other systems may be made, and new systems which relate remuneration to output or production may be introduced with the approval of an industrial authority. Although, in general, employers were required to observe the hours prescribed by competent authority, they were

permitted, in cases where some but not all of their employees had their hours reduced by legislation operative after 13th June, 1947 to apply the shorter hours to all employees, and in such cases the same pay for fewer hours of work was not deemed to be an increase in remuneration.

#### THE LIVING WAGE.

In determining minimum rates of wages the industrial tribunals apply the principle of a living wage which must be sufficient to enable the lowest-paid worker to live according to a reasonable standard of comfort.

Within the State jurisdiction the Court of Industrial Arbitration adopted the practice of fixing a living wage for the guidance of the wage-fixing tribunals in 1914, and in 1918 the living wage determined by the chief industrial tribunal after inquiry into the cost of living became a statutory right of men and women working under industrial awards. Information relating to the standard of living and living wage determinations up to April, 1937, the date of the last declaration by the State tribunal, is given on page 670 of the Year Book for 1938-39. In October, 1937 the basic wages determined by the Commonwealth Court of Conciliation and Arbitration were adopted by the State for the sake of uniformity.

The following statement shows the variations in the living wages, as determined by the industrial authority constituted under State legislation from February, 1914 to April, 1937. The determinations were made by the Court of Industrial Arbitration in the years 1914 to 1916, by the Board of Trade from 1918 to 1925, and later by the Industrial Commission:—

TABLE 702.—Living Wages Declared by State Industrial Authority (N.S.W.), 1914 to 1937.

Year.	Men.			Women.	
	Date of Declaration.	Living Wage. per week.	Number of Children included in Family Unit.	Date of Declaration.	Living Wage. per week.
		£ s. d.			£ s. d.
1914	16th February ...	2 8 0	Two	...	...
1915	17th December...	2 12 6	"	...	...
1916	18th August ...	2 15 6	"	...	...
1918	5th September ...	3 0 0	"	17th December...	1 10 0
1919	8th October ...	3 17 0	"	23rd December...	1 19 0
1920	8th October ...	4 5 0	"	23rd December...	2 3 0
1921	8th October ...	4 2 0	"	22nd December	2 1 0
1922	12th May ...	3 18 0	"	9th October ...	1 19 6
1923	10th April ...	3 19 0	"	10th April ...	2 0 0
1923	7th September ...	4 2 0	"	7th September ...	2 1 6
1925	24th August ...	4 4 0	"	24th August ...	2 2 6
1927	27th June ...	4 5 0	None	27th June ...	2 6 0
1929	20th December...	4 2 6	One	20th December...	2 4 6
1932	26th August ...	3 10 0	"	26th August ...	1 18 0
1933	11th April ...	3 8 6	"	11th April ...	1 17 0
1933	20th October ...	3 6 6	"	20th October ...	1 16 0
1934	26th April ...	3 7 6	"	26th April ...	1 16 6
1935	18th April ...	3 8 6	"	18th April ...	1 17 0
1936	24th April ...	3 9 0	"	24th April ...	1 17 6
1936	27th October ...	3 10 0	"	27th October ...	1 18 0
1937*	24th April ...	3 11 6	"	24th April ...	1 18 6

\* Subsequent changes in the living wages are shown in Table 704.

The family unit covered by the living wage for men consisted of a man, wife, and two children from 1914 to 1925, inclusive; a man and wife only in 1927; and a man, wife, and one child in 1929 and later. The rates as stated in the table for June, 1927 and subsequent dates were supplemented (subject to income qualifications) by family allowances paid by the State for dependent children under statutory school leaving age up to 1st July, 1942, one child in each family being excluded from endowment since December, 1929.

The living wage determinations of the Industrial Commission applied generally throughout the State to all industries within its jurisdiction. When the Commonwealth Court's method of determining basic wages was adopted by the State in October, 1937, provision was made for assessing different rates for certain districts, according to the practice of the Commonwealth Court. As explained on page 795, the basic wage under the Federal jurisdiction is not related to a defined family unit, and consists of the "needs basic wage", which is subject to periodical adjustment, and a constant loading addition. The "needs basic wage" fixed by the Court for the Metropolitan area and the districts of Newcastle and Port Kembla-Wollongong is adjusted according to the retail price index numbers for Sydney, the rate for the county of Yancowinna according to the index numbers for Broken Hill, and the rate for other localities is 2s. per week less than the Metropolitan rate. The fixed loading addition is 6s. a week.

The basic wages per week for the various districts and for Crown employees in New South Wales as from October, 1937 are shown below:—

TABLE 703.—Living Wages† (per week) in N.S.W.—State Awards and Agreements, 1937 to 1945.

Date.	Sydney, Newcastle, Wollongong— Port Kembla.		County of Yanco- winna.	Other Districts:		Crown Employees (all Districts).	
	Men.	Women.	Men.	Men.	Women.	Men.	Women.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1937—October ...	78 0	42 0	78 0	75 0	40 6	76 0	41 0
December ...	78 0	42 0	79 0	75 0	40 6	77 0	41 6
1938—March ...	79 0	42 6	79 0	76 0	41 0	77 0	41 6
June ...	79 0	42 6	81 0	76 0	41 0	78 0	42 0
September ...	80 0	43 0	82 0	77 0	41 6	78 0	42 0
December ...	81 0	43 6	82 0	78 0	42 0	80 0	43 0
1939—March ...	81 0	43 6	83 0	78 0	42 0	80 0	43 0
June ...	82 0	44 0*	85 0	79 0	42 6	80 0	43 0
September ...	81 0	43 6	84 0	78 0	42 0	80 0	43 0
December ...	82 0	44 0*	82 0	79 0	42 6	80 0	43 0
1940—February ...	82 0	44 0*	83 0	79 0	42 6	81 0	43 6
May ...	83 0	44 6*	83 0	80 0	43 0	81 0	43 6
August ...	85 0	45 6*	85 0	82 0	44 0*	83 0	44 6*
November ...	85 0	45 6*	85 0	82 0	44 0*	84 0	45 0*
1941—February ...	88 0	47 6	88 0	85 0	45 6*	86 0	46 0*
May ...	88 0	47 6	90 0	85 0	45 6*	87 0	46 6*
August ...	89 0	48 0	91 0	86 0	46 0*	87 0	46 6*
November ...	89 0	48 0	91 0	86 0	46 0*	88 0	47 6

TABLE 703.—Living Wages† (per week) in N.S.W.—State Awards and Agreements, 1937 to 1945—*continued*.

Date.	Sydney, Newcastle Wollongong— Port Kembla.		County of Yanco- winna.	Other Districts.		Crown Employees. (all Districts).	
	Men.	Women.	Men.	Men.	Women.	Men.	Women.
1942—February ...	91 0	49 0	92 0	88 0	47 6	90 0	48 6
May ...	93 0	50 0	94 0	90 0	48 6	92 0	49 6
August ...	95 0	51 0*	98 0	92 0	49 6	94 0	50 6*
November ...	97 0	52 6	99 0	94 0	50 6*	96 0	52 0
1943—February ...	98 0	53 0	100 0	95 0	51 6	97 0	52 6
May ...	98 0	53 0	99 0	95 0	51 6	97 0	52 6
August ...	100 0	54 0	102 0	97 0	52 6	99 0	53 6
November ...	99 0	53 6	101 0	96 0	52 0	98 0	53 0
1944—February ...	99 0	53 6	101 0	96 0	52 0	97 0	52 6
May ...	99 0	53 6	101 0	96 0	52 0	97 0	52 6
August ...	99 0	53 6	101 0	96 0	52 0	97 0	52 6
November ...	99 0	53 6	102 0	96 0	52 0	98 0	53 0
1945—February ...	99 0	53 6	102 0	96 0	52 0	97 0	52 6
May ...	98 0	53 0	102 0	95 0	51 6	97 0	52 6
August ...	98 0	53 0	103 0	95 0	51 6	97 0	52 6
November ...	99 0	53 6	103 0	96 0	52 0	97 0	52 6
1946—February ...	99 0	53 6	103 0	96 0	52 0	98 0	53 0
May ...	99 0	53 6	103 0	96 0	52 0	98 0	53 0
August ...	100 0	54 0	105 0	97 0	52 6	99 0	53 6
November ...	101 0	54 6	105 0	98 0	53 0	99 0	53 6
December‡ ...	108 0	58 6	112 0	105 0	56 6	106 0	57 0
1947—February ...	108 0	58 6	112 0	105 0	56 6	107 0	58 0
May ...	110 0	59 6	113 0	107 0	58 0	108 0	58 6
August ...	110 0	59 6	114 0	107 0	58 0	109 0	59 0
November ...	112 0	60 6	115 0	109 0	59 0	111 0	60 0

† Family allowances are not included in the rates stated in this table. \* 6d. higher in some awards.

‡ Special increase (Males, 7s.) from December, 1946, under Interim Judgment of Commonwealth Court.

The “needs basic wage” for Crown employees, *i.e.*, employees of the State Government and statutory bodies, is uniform in all districts. It is derived from the index numbers (weighted average) for five towns, Sydney, Newcastle, Broken Hill, Goulburn and Bathurst, and the fixed loading is 5s. a week—the amount applied by the Commonwealth Court in its award for employees of the railways of New South Wales. The basic wages for women are, as a general rule, 54 per cent. (calculated to the nearest 6d.) of the corresponding rates for men.

Except where an award or agreement provides otherwise, the basic wages are subject to adjustment at quarterly intervals according to the retail price index numbers of the preceding quarter. From December, 1937 to December, 1939, inclusive, the adjustments were made in March, June, September, and December, and since February, 1940, the rates have been adjusted a month earlier—in February, May, August, and November. Provision is



made, however, for uniformity—according to the Commonwealth award—in regard to basic wages and periods of adjustment where there are both State and Commonwealth awards for the same industry.

#### THE LIVING WAGE IN FEDERAL AWARDS.

In the Commonwealth Conciliation and Arbitration Act the basic wage or the principles to be adopted for its determination are not defined, though it is prescribed that cases relating to alterations in the basic wage or the principles on which it is computed are to be decided by the Chief Judge and at least two other Judges.

The general principles observed by the Court were stated in 1941 by the Chief Judge in the following terms: "The Court has always conceded the 'needs' of an average family should be kept in mind in fixing the basic wage. But it has never, as the result of its own inquiry, specifically declared what is an average family or what is the cost of a regimen of food, clothing, shelter and miscellaneous items necessary to maintain it in frugal comfort, or that a basic wage should give effect to any such finding. In the end, economic possibilities have always been the determining factor. . . . What should be sought is the independent ascertainment and prescription of the highest basic wage that can be sustained by the total of industry in all its primary, secondary and ancillary forms. . . . More than ever before wage fixation is controlled by the economic outlook".

A system of family allowances, payable at a flat rate—originally 5s. but raised to 7s. 6d. per week from June, 1945—was introduced by the Commonwealth Government on 1st July, 1941, and the New South Wales system of child endowment was abolished from that date. The allowances are paid in respect of each dependent child under the age of 16 years, except one in the family (see the chapter "Social Condition"). These provisions have rendered the size of the family unit a potential consideration of lessened importance in relation to the living wage.

In 1908 the Court adopted as a standard wage the "Harvester rate", of 7s. per day in Melbourne in 1907, which the President of the Court had determined as "fair and reasonable" for an unskilled labourer in a case under the Excise Tariff Act of 1906. The rate was based apparently on the needs of a family of "about five persons". Later it became customary to provide in awards and agreements for the periodical adjustment of the prescribed rates of wages according to changes in the cost of living. The adjustments are computed by the use of the retail price index numbers, and may be made at intervals of three or six months or, as in the case of pastoral industry awards, once a year.

In 1921 the President of the Court (Mr. Justice Powers) decided to add to the Harvester equivalent (ascertained by applying the retail price index numbers to the Harvester wage) the sum of 3s. to cover possible increases in the cost of living during the interval between adjustments.

In February, 1931 the Court directed a reduction of 10 per cent. in the rates of wages prescribed by Federal awards—except those exempted for special reasons. The reduction was applied not only to the basic wage element but also to the “Powers 3s.” and margins above basic rates, which hitherto had remained constant during the currency of awards, and operated until May, 1934, but its effect was modified to some extent twelve months earlier by a change in the method of computing the periodical adjustments.

In April, 1934 the Court abolished the “Powers 3s.”, restored the 10 per cent. to margins over the basic wage, gave the basic wage itself a new starting point, and simplified the method of assessment and adjustment, for which purpose it directed that “All Items” index numbers be used (see page 736). After the basic rates had been adjusted by the index numbers for the quarter January-March, 1934, and until June, 1937, no adjustment was made unless it amounted to at least 2s. per week.

Basic rates were determined for a number of provincial towns specified in the judgment, including Newcastle and Broken Hill, and the rates for other localities outside the Metropolitan areas were, as a general rule, 3s. less than the rate for the capital city in the same State. By later decisions the Sydney rates were applied to Port Kembla and to certain industries in Newcastle, *e.g.*, metal trades and timber industry.

In June, 1937 the Commonwealth Court added a fixed loading popularly known as the “prosperity loading” to current rates, so that the basic wage in the majority of Federal awards consists of (a) the “needs” basic wage, which is adjustable upon retail price index numbers, and (b) a loading addition which remains constant at the amount fixed by the Court. The loading was brought into operation in two instalments, the first in July, and the second in October, 1937. The amount is 6s. per week in New South Wales, Victoria, and Queensland, 4s. in South Australia, Western Australia and Tasmania, and 5s. where the wage is the average for four, five or six capital cities of Australia; 5s. in the railway undertakings in New South Wales and Victoria, and 3s. in the railways of South Australia and Tasmania.

The Court decided also to issue quarterly its own series of index numbers for the periodical adjustment of the basic wage in its awards. The “Court series” corresponds with the Commonwealth Statistician’s “All Items” series of retail price index numbers described on page 737, and adjustments in wages were made two months after the end of each quarter until February, 1940, when arrangements were made to adjust the rates a month earlier, that is, in February, May, August and November. The minimum variation in the needs basic wage for men became 1s. in place of 2s. per week from June, 1937, and the weekly rates are adjusted to the nearest shilling.

After hearings extending from August, 1940 to February, 1941, the Commonwealth Court unanimously refused an application by the combined unions for an increase in the basic wage, mainly because of the uncertainty of the economic outlook under existing war conditions, for which reason the application was stood over for further later consideration.

This case was revived at the instance of the Commonwealth Attorney-General on 30th October, 1946, in the course of the Standard Hours Case, upon application by the Australasian Council of Trade Unions for an "interim" basic wage declaration, and by other cases which had come to the Court since 1941. Beside the evidence and submissions tendered in the hearing of the basic wage applications, which extended from 25th November to 10th December, 1946, the Court had before it much relevant evidence tendered in the standard hours case, upon which the basic wage case was interposed.

As noted earlier in this chapter, the Court, in an interim judgment delivered on 13th December, 1946, directed an increase of 7s. in the basic wage, with existing loadings on the basic wage retained at the existing amounts. For the bulk of those affected the increase became effective from the beginning of the first pay period commencing in December, 1946, but to certain workers, *e.g.*, casual workers such as waterside workers and maritime employees, the higher rate was payable from 1st December, 1946. For females and juveniles the existing relative rates for males and females were to continue to apply. Rates for females remunerated under decisions of the Women's Employment Board or by National Security (Female Minimum Wage) Regulations (*i.e.*, in "vital" industries) were not subject to alteration by any order pursuant to this judgment.

The role of the Commonwealth Court of Conciliation and Arbitration in respect of the industrial provisions of the National Security (Economic Organisation) Regulations is indicated on page 791 of this volume.

In making an award as to basic wages in a particular industry, the Commonwealth Court may take into consideration any special circumstances affecting the industry, and the cost of living in localities to which the award relates. For this reason the basic rates in various Federal awards sometimes differ from one another in a substantial degree.

The trend of the basic rates generally used in awards of the Federal tribunals is illustrated in the following statement of the rates per week for each capital city of Australia at intervals from February, 1929 to October, 1937, and quarterly since September, 1939. The Harvester equivalent for Sydney was at its pre-depression peak in February, 1930, then fell heavily, but has shown an uninterrupted upward trend since 1934.

TABLE 704.—Basic Wages (per week), Federal Awards—Australian Capitals, 1929 to 1947.\*

Date.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Average Six Capital Cities.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1929—February ...	91 0	86 0	80 0	84 0	85 0	83 0	87 0
1930—February ...	95 6	90 0	81 0	87 0	83 6	86 6	90 6
November ...	88 0	83 0	70 6	78 0	79 0	82 0	83 0
1931—February ...	76 6	70 2	60 9	66 2	66 2	70 2	71 1
1932—February ...	68 10	63 5	58 6	58 1	60 9	64 10	64 4
1933—February ...	66 7	60 4	55 10	55 4	58 1	63 5	61 8
May ...	67 10	63 4	59 4	59 2	59 9	64 10	64 2
1934—February ...	66 11	63 4	59 4	60 2	59 3	64 10	63 9
May ...	67 0	64 0	61 0	61 0†	66 0	65 0†	65 0
1937—June ...	72 0	69 0	68 0	69 0	71 0	69 0	70 0
July ...	75 0	72 0	71 0	70 0	72 0	72 0	73 0
October ...	78 0	76 0	73 0	73 0	75 0	75 0	75 0
1939—September ...	81 0	81 0	76 0	78 0	77 0	77 0	79 0
December ...	82 0	80 0	76 0	77 0	77 0	77 0	79 0
1940—February ...	82 0	81 0	77 0	77 0	77 0	78 0	80 0
May ...	83 0	82 0	78 0	78 0	77 0	78 0	80 0
August ...	85 0	84 0	79 0	80 0	79 0	80 0	82 0
November ...	85 0	84 0	79 0	80 0	80 0	81 0	83 0
1941—February ...	88 0	86 0	82 0	82 0	81 0	83 0	85 0
May ...	88 0	87 0	83 0	83 0	82 0	84 0	86 0
August ...	89 0	87 0	83 0	84 0	84 0	85 0	86 0
November ...	89 0	88 0	84 0	84 0	85 0	85 0	87 0
1942—February ...	91 0	89 0	86 0	86 0	86 0	87 0	88 0
May ...	93 0	92 0	88 0	88 0	87 0	88 0	90 0
August ...	95 0	94 0	89 0	91 0	89 0	91 0	93 0
November ...	97 0	97 0	91 0	93 0	91 0	92 0	95 0
1943—February ...	98 0	98 0	91 0	93 0	92 0	94 0	96 0
May ...	98 0	98 0	92 0	93 0	92 0	94 0	96 0
August ...	100 0	99 0	94 0	94 0	94 0	95 0	98 0
November ...	99 0	98 0	93 0	94 0	94 0	95 0	97 0
1944—February ...	99 0	97 0	93 0	93 0	93 0	94 0	96 0
May ...	99 0	97 0	93 0	93 0	93 0	94 0	96 0
August ...	99 0	98 0	93 0	93 0	93 0	93 0	96 0
November ...	99 0	98 0	93 0	93 0	94 0	94 0	96 0
1945—February ...	99 0	98 0	93 0	93 0	93 0	94 0	96 0
May ...	98 0	98 0	93 0	93 0	93 0	93 0	96 0
August ...	98 0	98 0	93 0	93 0	94 0	93 0	96 0
November ...	99 0	98 0	93 0	93 0	94 0	94 0	96 0
1946—February ...	99 0	98 0	93 0	94 0	94 0	95 0	96 0
May ...	99 0	98 0	94 0	94 0	94 0	95 0	97 0
August ...	100 0	99 0	94 0	95 0	95 0	96 0	98 0
November ...	101 0	99 0	94 0	95 0	95 0	97 0	98 0
December† ...	108 0	106 0	101 0	102 0	102 0	103 0	105 0
1947—February ...	108 0	107 0	103 0	102 0	103 0	104 0	106 0
May ...	110 0	107 0	104 0	103 0	103 0	104 0	106 0
August ...	110 0	108 0	104 0	104 0	104 0	105 0	107 0
November ...	112 0	109 0	105 0	106 0	106 0	107 0	109 0

\* Not including Child Endowment in N.S.W. (from 23rd July, 1927) and Family Allowances in Australia (from 1st July, 1941).

† Actual rates payable; further increase (3s. Adelaide, 2s. Hobart) to be made in stages.

‡ Increase by interim judgment (see preceding page).

When necessary for an award, the Commonwealth Court assesses a minimum wage for women with regard to the needs of the employees in the industry concerned, and the ratio between the minimum wage for the women and the minimum for the men is preserved in periodical adjustments during the currency of the award. The majority of women working under Federal awards is employed in the clothing and printing industries.

## LIVING WAGE DETERMINATIONS IN THE VARIOUS STATES.

In Queensland, South Australia and Western Australia a standard living wage is fixed by industrial tribunals established under State jurisdiction. The Industrial Court of Queensland has adjusted basic wages at quarterly intervals since March quarter, 1942 according to the Commonwealth Statistician's retail price index numbers. In Victoria the rates of wages in the various industries are fixed by wages boards, and the boards must adopt Federal award rates where applicable. In Tasmania the standard of the Commonwealth Court is observed to some extent.

In Western Australia the State Arbitration Court determines a basic wage in June of each year, and may review the wage during its currency, if data supplied at quarterly intervals by the State Government Statistician indicate that a change of one shilling or more per week has occurred in the cost of living. By National Security (Economic Organisation) Regulation issued in June, 1942, the Premier of any State of which the law permitted, but did not require, the quarterly adjustment of the basic wage according to variations in the cost of living, was authorised to adjust the wage on the basis of information prepared by the Government Statistician. In August, 1942, the Premier of Western Australia issued an order adjusting the basic wages of that State.

Without abrogating the power of the Board of Industry to declare a living wage, the South Australian Parliament made provision for a proclamation, which declared the "daily living wage" in the metropolitan area to be one-sixth of the Commonwealth basic weekly wage for the area (102s. per week inclusive of the loading of 4s.) as from 7th January, 1947.

The family unit upon which the basic wage is determined by the State tribunal in Queensland consists of a man, wife, and three children. In South Australia and Western Australia the unit is not defined by legislation, but the respective tribunals have adopted a family unit which includes three children in South Australia and two children in Western Australia. In New South Wales the unit was a man, his wife and one child but, subject to income qualifications, the State Government paid family allowances at the maximum rate of 5s. per week for each additional child up to 30th June, 1941, after which family allowances were paid throughout Australia by the Commonwealth Government without regard to family income at the rate of 5s. per week for each dependant child, except one, under the age of 16 years. The rate was increased to 7s. 6d. per week from June, 1945.

The following statement shows the basic wages for adult males determined by the State industrial tribunals as at the end of each year from 1928 to 1937 and the variations other than by automatic adjustment since the beginning of the year 1938. The rates are per week:—

TABLE 705.—Living Wage declared by Industrial Tribunals in Various States, 1928 to 1947—Rates per week.\*

Year.	Sydney.		Brisbane.		Adelaide.		Perth.	
	Date of Declaration.	Rate.	Date of operation of Declaration.	Rate.	Date of operation of Declaration.	Rate.	Date of operation of Declaration.	Rate.
		s. d.		s. d.		s. d.		s. d.
1928 ...	...	85 0	...	85 0	...	85 6	...	85 0
1929 ...	...	82 6	...	85 0	...	85 6	...	87 0
1930 ...	...	82 6	...	77 0	...	75 0	...	86 0
1931 ...	...	82 6	...	74 0	...	63 0	...	73 6
1932 ...	...	70 0	...	74 0	...	63 0	...	70 6
1933 ...	...	66 6	...	74 0	...	63 0	...	69 3
1934 ...	...	67 6	...	74 0	...	63 0	...	71 0
1935 ...	...	68 6	...	74 0	...	66 0	...	70 6
1936 ...	...	70 0	...	74 0	...	69 6	...	73 9
1937 ...	...	78 0	...	78 0	...	74 0	...	74 11
1938 ...	†		Apr. 1	81 0	...	...	July 1	80 0
1939 ...	...		Aug. 7	84 0	Jan. 5	78 0	Apr. 24	82 2
1940 ...	...		...	...	Nov. 28	84 0	July 1	82 8
1941 ...	...		Mar. 31	89 0	Nov. 27	87 0	Apr. 28	88 0
1942 ...	...		May 4	91 0	Oct. 15	94 0	...	...
1943 ...	...		†	...	...	...	July 1	99 1
1944 ...	...		...	...	...	...	July 1	100 1
1946 ...	...		...	...	Sept. 26	98 6	July 1	101 1
1947 ...	...		...	...	Jan. 7	102 0‡	Feb. 26	107 1§
					Aug. 28	104 0	July 1	107 10

\* Family allowances payable in New South Wales up to 30th June, 1941, and subsequently in all States are not included. † Last declaration in N.S.W., 24th April, 1937 (£3 11s. 6d.); in Queensland, 15th April, 1942; rates varied subsequently with Commonwealth rate (see Table 704). ‡ By Governor's proclamation—see page 799. § Special declaration following Commonwealth Court's interim basic wage increase.

## SECONDARY WAGES.

The basic rates of wages apply to unskilled labour and the assessment of the secondary wages or marginal rates is considered separately in connection with each occupation. Under the State system in New South Wales, it is the usual practice when varying wages on account of an increase or decrease in the cost of living, to preserve unaltered the recognised margin between the skilled and the unskilled workmen in an industry and to vary all rates of wages by the amount by which the basic wage has been increased or reduced.

The Commonwealth Court determines in each case a marginal amount which it considers to be the fair value, as at the date of the award, of the skill required. The 10 per cent. reduction in operation by order of the Court from February, 1931 to May, 1934 was applied to the secondary as well as the basic wages.

## RATES OF WAGES.

The rates of wages for various occupations in 1921, 1929 and in each year 1939 to 1946, is shown in the following statement. Corresponding information for certain of the years 1911 to 1938 is given in Table 496 of the 1940-41 edition of the Year Book. Except where specified, the figures indicate the minimum amounts payable for a full week's work on the basis of the weekly, daily, or hourly rates fixed by industrial awards and agreements, and for occupations not subject to industrial determination the ruling or predominant rates are stated. The table contains particulars of a few occupations only, but similar information relating to a large number of callings is published annually in the "Statistical Register of New South Wales". In the Register for the year 1920-21 the rates are stated for each year from 1901 to 1913, inclusive, and for 1921; and the following issue contains the rates for each year from 1914 to 1922.

TABLE 706.—Rates of Wages in Various Occupations, 1921 to 1946.

Occupation.	1921.	1929.	1939.	1940.	1941.	1942.	1943 and 1944.	1945.	1946.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
<b>Manufacturing—</b>									
Cabinetmaker ...	101 9	108 6	108 0	111 0	119 0	127 0	133 0	133 0	142 0
Boilermaker ...	107 6	123 0	112 0	115 0	125 0	133 0	135 0	135 0	144 0
Coppersmith ...	109 6	118 6	113 0	116 0	125 0	133 0	136 0	136 0	145 0
Fitter ...	107 6	118 6	112 0	115 0	125 0	133 0	135 0	135 0	144 0
„ electrical ...	108 6	118 6	118 0	121 0	127 0	139 0	141 0	141 0	150 0
Baker ...	100 6	128 6	120 0	123 0	120 0	137 0	139 0	139 0	148 0
Bootlicker ...	98 6	102 6	105 0	110 0	113 6	125 6	127 6†	126 6	135 6
Tailor (ready-made) ...	102 6	108 0	101 0	104 0	112 0	125 0	128 0†	127 0	136 0
Compositor (jobbing) ...	105 0	116 0	109 0	112 0	116 0	129 0	133 0†	132 0	141 0
<b>Building—</b>									
Bricklayer ...	108 0	126 6	126 6	129 6	133 6	141 6	143 6	146 0	155 0
Carpenter... ..	110 0	125 0	126 6	129 6	133 6	141 6	143 6	146 0	156 6
Painter ...	104 0	116 0	115 6	119 0	122 6	134 6	136 6	136 6	145 6
Plumber ...	110 0	127 0	125 6	128 6	133 6	143 0	145 0	145 0	154 0
<b>Mining—</b>									
Coalwheeler * ...	15 7	18 3	18 8	21 1	24 3	26 0	25 8	25 8	27 6
„ per day. ...	16 3	18 9	19 2	21 7	24 9	26 3	26 10	26 10	28 8
Metalminer ...	15 2	16 0	19 3	19 10	21 2	24 0	24 5	24 5	26 2
„ per day. ...	15 8	16 3	20 6	20 6	21 8	24 6	24 11	24 11	26 8
<b>Transport—</b>									
Railway loco-driver ...	106 0	114 0	108 6	112 6	119 6	127 6	132 6	134 6	143 6
„ per hour ...	130 0	139 0	144 0	148 0	155 0	163 0	168 0	170 0	179 0
Wharf-labourer ...	2 9	2 11	2 10	2 11½	3 4½	3 8	3 8½	3 8½	4 0
<b>Rural Industries—</b>									
Shearer per 100 sheep ...	40 0	41 0§	35 6	36 0	38 0	40 3	41 3	45 0	46 9
Station-hand, with keep ...	48 0	54 8	45 6	46 0	51 9	57 6	60 3	60 3	64 9
<b>Miscellaneous—</b>									
Pick and shovel man ‡ ...	94 6	95 0	94 6	97 0	101 0	109 0	114 0	115 0	124 0
Standard minimum wage ...	82 0	82 6	82 0	85 0	89 0	97 0	99 0	99 0	108 0

\* n District. † Less 1s. in 1944. ‡ On Railway construction. § Less 2s. 3d. per week.

The wages of coalminers are based on contract rates, which vary according to the condition of the seams or places where the coal is mined.

Particulars of the award rates of wages for various classes of workers in the rural industries are given on page 393 *et seq.* of this volume. The rates for shearers and other pastoral employees are fixed by the Commonwealth Court of Conciliation and Arbitration. The award rates for shearing

ordinary flock sheep in New South Wales from September, 1927 to July, 1932 are shown in Table 497 of the 1940-41 edition of the Year Book. Changes in rates subsequent to July, 1932 were as follows:—

TABLE 707.—Wages Rates—Shearers in New South Wales.

Period.	Rate per 100 Sheep (Ordinary Flock).*	Period.	Rate per 100 Sheep (Ordinary Flock).*
	s. d.		s. d.
July, 1932 to Dec., 1932 ...	29 3	July, 1941 to Aug., 1942 ...	38 0
Jan., 1933 to May, 1934 ...	27 3	Aug., 1942 to Nov., 1942 ...	39 3
May, 1934 to June, 1936 ...	30 0	Nov., 1942 to May, 1943 ...	40 3
July, 1936 to June, 1937 ...	32 6	May, 1943 to June, 1945 ...	41 3
July, 1937 to Sept., 1938 ...	35 0	June, 1945 to Dec., 1946 ...	45 0
Sept., 1938 to Aug., 1940 ...	35 6	Dec., 1946 to Mar., 1947 ...	46 9
Aug., 1940 to Mar., 1941 ...	36 0	Mar., 1947 to June, 1947 ...	47 0
Mar., 1941 to July, 1941 ...	36 9	From June, 1947 ...	51 3

\* Machine shearing; for hand shearing the rates were 1s. per 100 higher.

The average weekly rates of wages payable to adult males in various groups of industries and the weighted average for all groups in New South Wales are compiled by the Commonwealth Statistician. For the computations, particulars are obtained in respect of 874 occupations. The industrial awards and agreements are the main sources of information, and for occupations not subject to industrial determinations, the ruling or predominant rates are ascertained from employers and from secretaries of trade unions. The occupations are classified into fourteen industrial groups, and the averages are calculated on the basis of the weekly rates payable to adult male employees in the metropolitan district, except in regard to the mining, shipping, and rural industries, which are conducted for the most part outside the metropolitan area.

In determining the average wage in each group an arithmetic mean is taken; that is, the sum of the rates is divided by the number of occupations, no detailed system of weights being applied owing to the difficulty of obtaining satisfactory data as to the number of persons employed in each occupation. In computing the average for all the industries combined, the average for each industrial group is weighted in accordance with the relative number of all male workers engaged in that group.

A comparative statement of the average weekly rates of wages (all industries) payable to adult males is as follows:—

TABLE 708.—Average Rate of Wages in Sydney, 1891 to 1947.

End of year.	Average rate per week.	End of year.	Average rate per week.	End of year.	Average rate per week.	End of year.	Average rate per week.
	s. d.		s. d.		s. d.		s. d.
1891 ...	44 1	1918 ...	65 11	1928 ...	102 7	1938 ...	95 0
1896 ...	42 1	1919 ...	76 9	1929 ...	102 11	1939 ...	96 7
1901 ...	43 11	1920 ...	94 0	1930 ...	99 1	1940 ...	99 7
1911 ...	51 5	1921 ...	95 10	1931 ...	93 5	1941 ...	105 4
1912 ...	54 3	1922 ...	91 6	1932 ...	84 11	1942 ...	118 3
1913 ...	55 9	1923 ...	94 6	1933 ...	81 11	1943 ...	121 3
1914 ...	56 2	1924 ...	93 6	1934 ...	83 2	1944 ...	121 4
1915 ...	57 7	1925 ...	96 0	1935 ...	84 2	1945 ...	121 10
1916 ...	61 11	1926 ...	100 5	1936 ...	85 6	1946 ...	130 11
1917 ...	64 5	1927 ...	101 10	1937 ...	92 1	1947 ...	137 7



The increases in the years 1938 to 1942 reflect the increases in the basic wage as shown in Tables 703 and 704, with the addition of war loadings in some industries. Wage pegging rendered movements negligible between 1942 and 1946, but relaxation of war-time controls and the increase in the basic wage under the interim judgment of the Commonwealth Arbitration Court in December, 1946 resulted in a significant increase in wages rates in 1946.

Changes in the average rates in the various groups since 1929 are illustrated below. In the shipping, pastoral, and domestic industries, where food and lodging are supplied, the value of such has been added to the rates of wages:—

TABLE 709.—Average Rates of Wages in Industries, 1929 to 1946.

Group of Industries.	Average Weekly Rates of Wages at end of Year.—Adult Males.						
	1929.	1939.	1942.	1943.	1944.	1945.	1946.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1. Wood, Furniture, Sawmill, Timber Works, etc. ...	107 9	102 9	122 1	125 10	125 10	125 10	134 10
2. Engineering, Shipbuilding, Smelting, Metal Works, etc.	103 10	100 10	120 7	122 5	122 11	123 0	132 0
3. Food, Drink, and Tobacco, Manufacture and Distribution ...	101 2	99 4	117 10	120 2	120 2	120 9	129 8
4. Clothing, Hats, Boots, Textiles, Rope, Cordage, etc. ...	96 10	92 3	115 3	117 11	117 5	117 4	125 9
5. Books, Printing, Bookbinding, etc. ...	123 6	120 9	134 0	136 1	135 7	135 7	154 3
6. Other Manufacturing ...	103 7	99 1	118 4	120 8	120 6	120 9	130 0
7. Building ...	114 7	110 0	130 0	132 0	132 0	132 10	142 11
8. Mining, Quarries, etc. ...	112 9	113 1	125 6	128 5	128 4	128 4	137 4
9. Railway and Tramway Services	107 8	97 4	119 11	124 2	124 3	124 4	133 7
10. Other Land Transport ...	97 1	96 10	112 6	114 6	114 6	117 8	126 8
11. Shipping, Wharf Labour, etc.	106 2	99 1	120 5	123 4	122 8	122 11	132 2
12. Pastoral, Agricultural, Rural, Horticultural, etc. ...	100 9	80 2	117 3	119 7	119 6	121 6	129 3
13. Domestic, Hotels, etc. ...	92 7	92 1	109 0	111 0	111 9	111 9	121 4
14. Miscellaneous ...	96 5	95 2	112 3	116 7	116 7	116 9	125 9
All Industries ...	102 11	96 7	118 3	121 3	121 4	121 10	130 11

## INDEX NUMBERS—NOMINAL AND EFFECTIVE WAGES.

The foregoing tables relate to the nominal rates of wages, that is the actual amounts of money payable in return for labour, and in order to show the effective value of these amounts it is necessary to relate them to the purchasing power of money as in the following statement. For this purpose the average rates of wages have been reduced to index numbers and these index numbers have been divided by index numbers of retail prices in Sydney computed from the Commonwealth Statistician's "All Items" index numbers, "C" series (see page 736). The results indicate the changes in the effective wage.

The nominal wage for each of the years ended June, as shown in the table, represents the mean of the average rates at the end of the four quarters. Index numbers, calculated on the foregoing bases, are as follows:—

TABLE 710.—Index Numbers of Nominal and Effective Wages in New South Wales, 1923-27 to 1946-47.

Year. ended June.	Average Nominal Wage for a Full Week's Work.—Adult Males.		Index Number of Retail Prices, Sydney, "All Items." †	Index Number of Effective Wages (Full Work).
	Amount.	Index Number.		
	s. d.			
1923-27* ...	96 0	1000	1000	1000
1928 ...	102 1	1063	1020	1042
1929 ...	102 10	1071	1034	1036
1930 ...	102 11	1072	1042	1029
1931 ...	98 2	1023	954	1072
1932 ...	93 3	971	872	1114
1933 ...	85 0	885	827	1070
1934 ...	82 10	863	819	1054
1935 ...	83 2	866	826	1048
1936 ...	84 2	877	845	1038
1937 ...	85 9	893	860	1038
1938 ...	91 9	956	881	1085
1939 ...	95 2	991	910	1089
1940 ...	96 9	1008	929	1085
1941 ...	101 1	1053	984	1070
1942 ...	107 6	1120	1039	1078
1943 ...	118 0	1229	1120	1078
1944 ...	121 5	1265	1124	1097
1945 ...	121 3	1263	1120	1128
1946 ...	121 10	1269	1128	1125
1947 ...	129 6	1349	1160	1163

\* Calendar years.

† Mean of the Commonwealth Statistician's index number for Sydney (base, average six Capital cities in 1923-27=1000) for the four quarters of each financial year expressed in ratio to the index number for Sydney (1020) for the base period 1923-27.

The rates of wages, nominal and effective, as stated in the foregoing tables, are based on the rates payable to employees under awards or agreements or predominant rates for work without intermittency or overtime, and not on actual earnings, which fluctuate with the rise and fall in the volume of employment.

#### WAGES PAID IN NEW SOUTH WALES.

Particulars of the actual amount of wages paid in New South Wales are not available. Estimates based upon the information available appeared in issues of the Year Book up to 1940-41 (see page 592 of that edition). The Commonwealth Statistician publishes estimates, based upon pay-roll tax returns believed to cover about 80 per cent. of the total wages paid, in the "Monthly Review of Business Statistics", but has found it necessary to undertake a revision of the estimates.

There are records of actual wage payments in the manufacturing and mining industries and of the payments made to New South Wales and Commonwealth Government employees, but the amount of wages paid to persons employed on rural holdings has not been collected since 1940-41. At no time has it been practicable to ascertain the wages paid in private commercial, trading and transport enterprises, the professions and building and construction industries, etc..

The greater proportion of wage and salary earners in New South Wales is covered by the Workers' Compensation Act (see page 762), and as shown on page 769, the estimated amount of wages paid to such workers was £189,877,888 in 1945-46 and £242,037,811 in 1946-47. The amount of salaries and wages paid in factories (distinguishing Governmental and private establishments) is shown on page 629 and in mines on page 672 of this volume. Certain, but incomplete, information regarding wages paid in rural industries is given on page 393. The following statement shows the amount of salaries and wages paid in New South Wales to employees of the New South Wales and Commonwealth Governments in each year (excluding 1941-42) since 1936-37:—

TABLE 711.—Salaries and Wages Paid to Government Employees in N.S.W., 1936-37 to 1946-47.

Year ended June.	New South Wales Government.	Commonwealth Government.	Total.	Year ended June.	New South Wales Government.	Commonwealth Government.	Total.
	£000	£000	£000		£000	£000	£000
1937 ...	25,195	4,665	29,860	1943 ...	42,023	19,717	61,740
1938 ...	28,383	5,178	33,561	1944 ...	41,063	20,675	61,738
1939 ...	29,526	5,844	35,370	1945 ...	41,265	18,971	60,236
1940 ...	30,364	6,726	37,090	1946 ...	43,535	17,030	60,565
1941* ...	32,587	8,597	41,184	1947 ...	49,867	17,397	67,264

\* Figures for 1941-42 not available.

## PRODUCTION.

The value of production, as shown in this section, relates to the primary industries—pastoral, agricultural, dairying and farmyard, mining, forestry, fisheries, and trapping—and to the manufacturing industries.

The values of rural production in Table 712 are stated as at the point or place of production, on the basis of the prices to the producers, which are somewhat less than the wholesale prices in the metropolitan market. No deduction has been made on account of the cost of items such as seed, fertilisers, containers, fodder for animals, machinery, etc.. The net values are shown in Table 714.

Some of the quotations of the value of production are known to be understated. For instance, the values as estimated for agricultural and farmyard produce are deficient, because, with few exceptions, records are not available as to production (which in the aggregate must be large) on areas less than one acre in extent. The production from fisheries includes only catches of licensed fishermen.

The figures showing the estimated value of mining production in each year from 1911 to 1919-20 inclusive are based on the records of the Department of Mines, of which details are stated in the chapter of this volume relating to the mining industry. The values shown for 1921 and subsequent years are those supplied by the mine-owners in returns collected under the Census Act, and they indicate the estimated value at the mines of the minerals raised during each year. The values for 1925-26 and later years include the production from quarries; in earlier years only the output from quarries held under mining title was included.

The value of the manufacturing production is taken as the value at the factory of the manufactured goods less the cost of materials, water, fuel, and electricity, and containers used, and of tools replaced. With a few exceptions returns are not collected as to the production in small establishments employing less than four hands where manual labour only is used, nor from butchers' smallgoods factories. (See page 606 of this volume.)

The values quoted for the specified industries do not include the value added by reason of transportation to market and distribution to the consumer, nor do the estimates include values in respect of many important activities, such as the building industry, railway construction, commercial and other pursuits.

The following statement shows the estimated value of production of the specified industries, at the place of production, at intervals since 1911. The values relate to the calendar year up to 1915-16 when the year ended

June was substituted. The values for mines and quarries are an exception, as those stated for the years 1915-16 to 1931-32 relate to the calendar years 1916 to 1932, and for those for 1932-33 to 1946-47 to the calendar years 1932 to 1946 respectively:—

TABLE 712.—Value of Primary and Manufacturing Production, 1911 to 1946-47 (Valued at place of production).

Year.	Primary Industries.							Manu- facturing Industries	Total, Primary and Manu- facturing Industries.
	Rural Industries.				Forests, Fisheries, and Trap- ping.	Mines and Quarries. *	Total, Primary Indus- tries.		
	Pastoral.	Agri- cultural.	Dairying and Farm- yard.	Total, Rural Indus- tries.					
	£000	£000	£000	£000	£000	£000	£000	£000	£000
1911 ...	20,586	9,749	6,534	36,869	2,213	7,392	46,474	19,432	65,906
1913 ...	21,555	12,378	7,063	40,996	2,644	8,712	52,352	23,764	76,116
1920-21	20,336	32,373	16,447	69,156	4,089	10,192	83,437	43,128	126,565
1928-29	40,679	19,356	14,559	74,594	5,298	10,207	90,099	73,627	163,726
1930-31	17,835	12,328	12,039	42,202	2,669	6,341	51,212	49,524	100,736
1931-32	19,331	14,547†	11,525	45,403	2,578	6,227	54,208	46,653	100,861
1935-36	33,641	16,796†	14,112	64,549	4,165	8,045	76,759	69,470	146,229
1936-37	40,306	23,416	14,592	78,314	4,196	9,690	92,200	76,754	168,954
1937-38	35,257	20,430	16,113	71,800	3,853	12,014	87,667	85,168	172,835
1938-39	24,894	18,459	10,359	53,712	3,485	11,702	74,899	90,266	165,165
1939-40	35,550	21,237†	16,188	72,975	3,710	12,914	89,599	96,609	186,208
1940-41	36,718	14,279†	10,825	67,822	4,667	12,297	84,786	115,044	199,830
1941-42	35,506	20,308	16,558	72,372	6,052	14,766	93,190	138,790	231,980
1942-43	39,507	29,144	21,384	90,035	5,519	15,481	111,035	153,582	264,617
1943-44	44,136	32,750	23,544	100,430	7,039	15,929	123,398	162,726	286,124
1944-45	38,697	21,995†	25,403	86,095	7,071	16,004	109,170	159,875	269,045
1945-46	35,426	44,573†	27,308	107,307	8,933	16,046	132,286	153,179	285,465
1946-47	53,869	25,035††	27,048	105,952†	10,442	19,796	136,190	186,546	322,736†

\* Calendar year : see context above. † Including Government assistance to wheat growers.

† To be increased by further payments from wheat pool.

Apart from seasonal influences, fluctuations in the value of pastoral production are mainly the result of variations in the prices of wool.

In agriculture wheat is the outstanding product, and seasonal conditions which affect the extent of cultivation and the size of the harvests are the cause of frequent fluctuations in the annual values of production, apart from the variations in the price of this cereal which depends upon the state of oversea markets, rather than upon local supply and demand. When the influence of both factors—season and price—bears in the same direction, up or down, the fluctuations are considerable.

A comparative statement of the quantity and value of wool, wheat and butter produced in various years since 1911 is shown in Table 715.

In the mining industry coal is the principal product. The production in 1946 was estimated as follows:—Coal mines, £10,535,000, other mines, £8,205,000, and quarries £1,056,000.

In the following table the estimated value of production, as at place of production in each year, is shown in relation to the population.

TABLE 713.—Value of Production Per Capita, 1911 to 1946-47.  
(Valued at place of production).

Year.	Primary Industries.								Manufacturing Industries.	Total Primary and Manufacturing Industries.																			
	Rural Industries.				Forests, Fisheries, and Trapping.	Mining.	Total, Primary Industries.																						
	Pastoral.	Agricultural.	Dairying and Farm-yard.	Total, Rural Industries.																									
1911	£ 12	s. 7	d. 3	£ 5	s. 17	d. 1	£ 3	s. 18	d. 6	£ 22	s. 22	d. 10	£ 1	s. 6	d. 7	£ 27	s. 27	d. 2	£ 11	s. 13	d. 5	£ 39	s. 39	d. 11	£ 7				
1913	11	16	11	6	16	0	3	17	7	22	10	6	1	9	1	4	15	8	28	15	3	13	1	2	41	16	5	7	
1920-21	9	14	8	15	9	11	7	17	5	33	2	0	1	19	1	4	17	7	39	18	8	20	12	10	60	11	6	0	
1928-29	16	7	0	6	7	15	10	5	17	2	30	0	6	2	2	8	4	2	36	5	4	29	12	9	65	18	1	8	
1930-31	7	0	2	4	16	11	8	4	14	7	16	11	8	1	1	0	2	9	10	20	2	6	19	9	2	39	11	8	7
1931-32	7	10	7	5	13	3	3	4	9	10	17	13	8	1	0	1	2	8	6	21	2	8	18	3	4	39	5	7	0
1935-36	12	13	3	6	6	6	5	6	3	24	6	0	1	11	4	3	0	7	28	17	11	26	3	0	55	0	11	7	
1936-37	15	0	8	8	14	8	5	8	11	29	4	3	1	11	3	3	12	4	34	7	10	28	12	8	63	0	6	1	
1937-38	13	0	4	7	10	10	5	18	11	26	10	1	1	8	5	4	8	9	32	7	3	31	8	10	63	16	1	0	
1938-39	9	2	1	6	15	1	5	19	8	21	16	10	1	5	6	4	5	7	27	7	11	33	0	4	60	8	3	0	
1939-40	12	17	7	7	13	10	5	17	3	26	8	8	1	6	10	4	13	7	32	9	1	34	19	11	67	9	0	0	
1940-41	13	3	11	5	2	8	6	0	11	24	7	6	1	13	6	4	8	5	30	9	5	41	6	11	71	16	4	0	
1941-42	12	13	5	7	4	11	5	18	2	25	16	6	2	3	2	5	5	5	33	5	1	49	10	6	82	15	7	7	
1942-43	13	19	1	10	5	11	7	11	1	31	16	1	1	18	11	5	9	5	39	4	5	54	5	1	93	9	6	6	
1943-44	15	9	2	11	9	5	8	5	0	35	3	7	2	9	4	5	11	7	43	4	6	57	0	0	100	4	6	0	
1944-45	13	8	3	7	12	6	8	16	1	29	16	10	2	9	0	5	11	0	37	16	10	55	8	5	93	5	3	0	
1945-46	12	3	3	15	6	1	9	7	6	36	16	10	3	1	4	5	10	2	45	8	4	52	11	9	98	0	1	0	
1946-47	18	3	7	*8	8	11	9	2	6	*35	15	0	3	10	6	6	13	7	*45	19	1	62	18	11	108	18	0	*0	

\* To be increased by further payments from wheat pool.

## ESTIMATED NET VALUE OF PRODUCTION—PRIMARY INDUSTRIES.

The foregoing estimates of the value of primary production represent gross values (at the place of production), including such costs as fodder consumed by farm stock, seed, fertilisers, spraying, power and water used in irrigating, etc.. By deducting the estimated cost of these items from the gross values, the net values of primary production have been estimated for the year 1928-29 to 1946-47 as follows; no deduction has been made for depreciation of capital, machinery or plant:—

TABLE 714.—Net Value of Primary Production, 1928-29 to 1946-47  
(Valued at place of production).

Year.	Pastoral.	Agricultural.	Dairying and Farm-yard.	Total Rural Industries.	Forestry, Fisheries and Trapping.	Mining.	Total Primary.
1928-29	£000	£000	£000	£000	£000	£000	£000
1928-29	40,356	15,631	12,092	68,079	5,241	8,722	82,042
1930-31	17,592	9,776	10,383	37,751	2,608	5,249	45,608
1931-32	19,024	12,969	9,624	41,617	2,527	5,074	49,218
1935-36	32,799	14,139	11,466	58,404	4,117	6,792	69,313
1936-37	39,300	20,515	11,357	71,172	4,145	8,350	83,667
1937-38	33,939	16,260	12,480	62,679	3,798	10,416	76,893
1938-39	23,613	13,401	13,147	50,161	3,429	9,948	63,538
1939-40	34,562	18,093	13,266	65,921	3,658	10,927	80,506
1940-41	35,305	11,215	13,368	59,888	4,646	10,233	74,767
1941-42	34,121	16,043	12,834	62,998	6,045	12,403	81,446
1942-43	38,212	24,444	17,070	79,726	5,507	12,897	98,130
1943-44	42,580	27,916	18,112	88,608	7,026	13,158	108,792
1944-45	37,452	17,499	20,080	75,031	7,048	13,137	95,216
1945-46	34,043	39,199	21,596	94,838	8,938	13,116	116,862
1946-47	52,666	19,236*	21,179	93,081*	10,338	16,493	119,915*

\* To be increased by further payments from wheat pool.

Details regarding deductions from the gross values are published in the chapters of this Year Book relating to the rural industries.

WOOL, WHEAT AND BUTTER—PRODUCTION AND FARM VALUES.

Season to season variations in the quantity and value of wool, wheat and butter, the chief rural products, are the predominant causes of fluctuation in the value of primary production. Particulars regarding these major products are given in the next statement; those for value may be compared with the total values of pastoral agriculture and dairy and farmyard production shown in Table 712.

Butter production in seasons since 1934-35, as stated in the following table, is the quantity produced from New South Wales milk and cream used for making butter in this or other States, and excludes butter produced in New South Wales factories from Victorian or Queensland milk or cream. Data for the interstate adjustments are not available for years prior to 1934-35, and the production shown for those years is the actual quantity made on farms or in factories in New South Wales, and is not entirely correct for value of production purposes. (In 1934-35 total production from New South Wales milk or cream was 147,962,646 lb. of butter, of which 2,695,951 lb. was made in Victoria and Queensland, and in that year New South Wales factories produced 828,733 lb. of butter from Victorian and Queensland milk or cream.) However, the figures illustrate fairly the fluctuations in value due to variations in production.

In valuing production all receipts in respect of each product—market realizations and governmental assistance—are taken into account. Accordingly, the average value to the farmer per bushel of wheat or per lb. of butter are stated on this basis also. The amount of governmental assistance, the seasons affected, and the equivalent value per unit of production of these payments are shown in Table 716. Woolgrowers have not received any corresponding assistance, and the average value per lb. quoted is the average price paid for greasy wool at Sydney auctions, where the bulk of the clip is sold or on appraisalment during the war years. The average value for wheat is for wheat delivered at country railway stations, less the cost of bags, and for butter is the average per lb. paid to the farmer at butter factories for milk and cream supplied, stated as per lb. of butter made therefrom.

TABLE 715.—Production of Wool, Wheat and Butter, 1911 to 1946-47.

Season.	Wool.			Wheat (Grain).			Milk for Butter.*		
	Quantity.	Value to Grower.		Quantity	Value to Farmer.		Quantity in terms of Butter.	Value to Farmer.	
		Amount.	Av. price per lb. (greasy) Sydney Sales.		Amount (incl. Govt. assistance).	Av. per bus. at country railway.		Amount (incl. Govt. assistance).	Av. per lb. of Butter.
	000 lb.	£000	d.	000 bus.	£000	s. d.	000 lb.	£000	d.
1911 ...	404,655	12,421	8-1	25,088	4,113	3 3-0	83,205	3,631	10-5
1913-14	379,450	13,143	9-1	38,020	5,988	3 2-0	77,779	3,450	10-8
1920-21	275,269	13,023	12-5	55,625	20,164	7 3-0	84,268	8,411	24-0
1925-26	402,490	26,223	16-5	33,806	8,590	5 1-0	106,968	7,045	15-8
1928-29	482,920	30,879	16-5	49,257	9,851	4 0-0	96,244	6,779	17-1
1929-30	459,970	18,099	10-5	34,407	5,448	3 2-0	105,022	6,842	15-8
1930-31	427,220	13,705	8-7	65,877	5,215	1 7-0	114,202	5,931	12-6
1931-32	501,648	15,233	8-3	54,966	8,130	2 11-5	123,847	5,750	11-2
1932-33	532,080	16,659	8-5	78,339	9,800	2 6-0	128,931	6,018	9-4
1933-34	484,390	29,951	15-8	57,057	7,013	2 5-8	143,868	5,167	8-4

\* See explanation in penultimate paragraph preceding this table.

TABLE 715.—Production of Wool, Wheat and Butter, 1911 to 1946-47—*cont'd.*

Season.	Wool.			Wheat (Grain).			Milk for Butter.*		
	Quantity.	Value to Grower.		Quantity	Value to Farmer.		Quantity in terms of Butter.	Value to Farmer.	
		Amount.	Av. price per lb. (greasy) Sydney Sales.		Amount. (incl. Govt. assistance).	Av. per bus. at country railway.		Amount (incl. Govt. assistance).	Av. per lb. of Butter.
	000lb.	£000	d.	000lb.	£000	s. d.	000lb.	£000	d.
1934-35	494,981	18,045	9-7	48,678	7,150	2 11-5	147,963	5,800	9-4
1935-36	472,585	25,408	14-0	48,822	8,137	3 3-8	126,031	5,486	11-4
1936-37	503,616	32,001	16-4	55,668	12,080	4 8-0	110,746	5,630	12-2
1937-38	495,027	24,060	12-7	55,014	9,229	3 5-0	121,507	6,582	13-0
1938-39	487,141	17,076	10-3	59,898	6,695	2 3-3	119,542	6,489	13-0
1939-40	546,273	28,283	13-4†	70,552	11,451	3 3-2	117,833	6,666	13-6
1940-41	536,907	27,127	13-1†	23,933	4,286	3 7-0	110,058	6,241	13-6
1941-42	547,000	27,458	13-1†	48,500	8,011	3 3-6	90,553	5,119	13-6
1942-43	497,538	29,154	15-1†	51,693	10,273	3 11-7	99,636	6,607	18-0
1943-44	537,410	31,703	15-3†	47,500	11,391	4 9-6	93,197	7,130	18-6
1944-45	448,683	26,112	15-1†	17,134	4,485	5 2-8	77,117	6,106	19-3
1945-46	431,549	25,234	15-1†	62,526	21,644	6 11-1	79,309	6,618	20-3
1946-47	482,621	40,277	23-6	15,682	6,976‡	7 10-0‡	65,828	5,504	20-3

\* See explanation in penultimate paragraph preceding this table. † Based upon price paid by agreement by United Kingdom Government. ‡ To be increased by further payments from wheat pool.

Market receipts of wheatgrowers were augmented by bounty or other direct governmental assistance in the seasons 1931-32 to 1935-36, in 1938-39 and 1940-41, and again from 1944-45 to 1946-47. In addition, the war-time and post-war wheat pool distributions included part of the proceeds of the Flour Tax (see page 459) which ceased as from 22nd December, 1947. In years of great seasonal adversity growers were assisted on the basis of sown acreage which yielded no grain or only a few bushels per acre. Consequently the average values shown in the table for seasons such as 1944-45 and 1946-47, derived by relating all proceeds of assistance to the very small harvests, do not reflect the real unit values of wheat produced in those seasons.

The subsidisation of butter commenced in the season 1942-43. Subsidy is distributed through the factories and the price paid for milk or cream for butter since that season has included subsidy.

The amount of governmental assistance included in the value of production of wheat and butter in the foregoing table is shown below, together with the average unit equivalent, and the average value per unit exclusive of governmental assistance in each affected season is shown also:—

TABLE 716.—Governmental Assistance in Relation to Value of Production of Wheat and Butter, New South Wales.

Wheat (Grain).				Milk or Cream for Butter.			
Season.	Governmental Assistance.		Av. Value per bus. excluding Govt. Assistance.	Season.	Governmental Assistance.		Av. Value per lb. excluding Government Assistance.
	Amount.	Equiv. per bus. of wheat produced.			Amount.	Equiv. per lb. of butter produced.	
	£	d.	s. d.		£	d.	d.
1931-32 ...	992,500	4-5	2 7				
1932-33 ...	1,012,902	3-0	2 3				
1933-34 ...	911,094	3-8	2 2				
1934-35 ...	1,121,600	5-5	2 6				
1935-36 ...	564,368	2-8	3 1				
1938-39 ...	1,329,180	5-8	1 9-5	1942-43...	483,245	1-24	14-75
1940-41 ...	320,000	3-2	3 3-8	1943-44...	1,460,983	3-99	14-60
1944-45 ...	777,530	10-9	4 3-9	1944-45...	1,382,409	4-63	14-70
1945-46 ...	106,040	0-4	6 10-7	1945-46...	1,175,984	3-80	16-47
1946-47 ...	1,365,950	20-9	6 1-1*	1946-47...	785,981	3-12	17-20

\* To be increased by further payments from wheat pool.



Wool production reached a record in 1941-42, and clips were heavy from 1939-40 to 1943-44, but severe drought subsequently caused heavy losses of sheep, and clips were about 20 per cent. below the high war-time level in 1945-46 and 1946-47. Nevertheless, as the result of the sharp post-war rise in wool prices the value to woolgrowers in 1946-47 was, by far, the greatest ever recorded.

Except for average crops from 1941-42 to 1943-44, poor to very poor wheat harvests alternated with average to very large wheat yields during the war period. Severely affected by drought, wheat production in 1946-47 was the poorest since 1919-20, and the harvest of 1944-45 was very little better. The effect upon the return to farmer was cushioned to some extent by relatively high unit values, a bountiful harvest in 1945-46, and governmental assistance. The value of wheat production in 1945-46 was the greatest on record.

Production of milk for butter contracted almost uninterruptedly during the war years and in 1946-47 (a very dry season) the output of butter was approximately only one-half the average output in the five seasons ended 1934-35, and 55 per cent. of the quantity in 1938-39. However, as a result of higher market prices and subsidy payments, the value to dairy farmers in 1946-47 was within about 15 per cent. of the value in the immediate pre-war season.

The factors affecting the production and value of these major products are reviewed in more detail in the chapters of this volume relating to the rural industries.

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## SOCIAL CONDITION.

### SOCIAL SERVICES—HEALTH AND RELIEF.

Social services in relation to public health and welfare and relief in necessitous circumstances, sickness, infirmity or unemployment are provided in New South Wales by the Governments of State and Commonwealth. In local areas executive duties in relation to public health and certain welfare functions are undertaken by councils of municipalities and shires. Many private organisations also are active in providing relief and promoting social welfare.

#### *Departments of Health—State and Federal.*

The Department of Public Health of New South Wales is organised in two branches, one directed by the Board of Health and the other by the Director-General of Public Health. The Board is the central executive and administrative authority. It consists of ten members (including four legally qualified medical practitioners) all being nominated by the Government; the Director-General, who is one of the medical practitioners and a permanent salaried officer of the Government, is *ex officio* President. The Board acts in an advisory capacity towards the Minister for Health and the Government and exercises general supervision in regard to public health matters. The Director-General controls the State medical services and the State institutions for the treatment of the sick and infirm.

In the Department there are divisions for maternal and baby welfare, social hygiene, tuberculosis, industrial hygiene, laboratories, sanitation and pure food, each in charge of a specially-qualified officer.

Public hospital services are supervised by the Hospitals Commission under the presidency of the Minister for Health, and there is a school medical service.

The Federal Department of Health administers quarantine services and conducts research into matters affecting public hygiene. It controls the Australian Institute of Anatomy at Canberra, serum laboratories, an X-ray and radium laboratory in Victoria and health laboratories in various localities throughout the Commonwealth, and in association with the University of Sydney, conducts the School of Public Health and Tropical Medicine at the University.

The National Health and Medical Research Council of Australia co-ordinates the work of the Commonwealth and the various State health services; it consists of the principal Government health officers in Australia.

The Council advises the Commonwealth and State Governments on health questions generally and devises measures for co-operation and for uniformity in health legislation and administration.

Medical research in Australia is conducted in association with international research organisations. Annual Cancer Conferences were initiated in 1928 and radium for research and treatment has been acquired by the Commonwealth.

The Medical Research Endowment Fund was established by the Commonwealth in 1937 to promote medical research. It is administered by the National Health and Medical Research Council.

#### *Social Welfare Services.*

Social welfare services of the State Government include the services concerned with industrial hygiene, industrial training and employment and the social aid service under the control of the Minister for Labour and Industry and Social Welfare, also the child welfare services administered by the Minister for Education.

State systems of family allowances and widows' pensions have been replaced in recent years by Commonwealth systems, though the State supplements widows' pensions by providing allowances for their children.

Age pensions, invalid pensions, war pensions, maternity allowances, unemployment, sickness and hospital benefits are provided by the Commonwealth Government. These schemes, with the exception of hospital benefits, are administered by the Commonwealth Department of Social Services, established in 1939.

The Commonwealth Government may effect reciprocal agreements with other countries in relation to pensions and other social benefits.

#### *National Fitness.*

A movement for the advancement of national fitness, particularly the fitness of young persons, is fostered in New South Wales by the activities of a State Council for Physical Fitness under the presidency of the Minister for Education. Similar bodies have been formed in the other Australian States and there is a Commonwealth body which allocates Commonwealth grants for the encouragement of the movement.

#### GOVERNMENT EXPENDITURE ON HEALTH AND RELIEF.

The expenditure from revenue by State and Commonwealth Governments on health and charitable relief, family allowances, pensions for the aged and invalids, widows' pensions and other social services in New South Wales is shown below. Capital charges on loans expended on such objects and expenditure from loans, e.g., on works such as hospital buildings, are not included in the statement. Moreover, Commonwealth expenditure as shown does not include war pensions or rehabilitation services or cost of administration of health and social services.

Advances by Commonwealth to the State for public hospital benefits are classified as Commonwealth expenditure (see page 837).

TABLE 717.—Government Expenditure on Public Health and Social Amelioration in New South Wales, 1938-39 to 1946-47.

Expenditure from Revenue on—	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.
	£	£	£	£	£
<b>Public Health (State)—</b>					
Government hospitals; subsidies to hospitals, etc. ....	1,160,640	1,951,954	2,252,386	2,760,670	2,934,945*
Mental hospitals and like institutions	809,705	940,935	975,759	1,049,004	1,212,721
Baby health centres, maternity homes, etc. ....	70,476	95,561	95,821	99,368	95,436
Inspection of food, dairies, etc. ....	18,007	20,509	22,438	37,257	26,451
Medical examination of school children ....	37,540	94,018	101,363	118,258	130,415
Administration, medical services, etc.	171,395	465,435	308,473	297,031	363,001
Hospitals (from profits of Government Insurance Office) ....	.....	10,303	25,638	54,727	70,076
Other ....	523	40,313	58,768	38,200	39,182
<b>Total ...</b>	<b>2,268,286</b>	<b>3,628,028</b>	<b>3,840,646</b>	<b>4,454,515</b>	<b>4,872,827</b>
<b>Social Amelioration (State)—</b>					
Relief of destitute, blind, aged, etc. ....	430,369	450,343	558,368	521,461	573,079
Maintenance of deserted wives, widows and children ....	350,278	237,201	248,382	238,238	271,260
Widows' pensions ....	630,321	167,217	154,398	148,977	149,125
Care of aboriginals ....	76,454	49,522	52,894	51,738	57,588
Unemployment relief †	608,579	.....	134	915	3,064
Food relief ....	1,419,836	189,650	203,268	192,315	217,353
Family allowances ....	1,363,833	.....	.....	.....	.....
Administration ....	264,550	88,438	84,763	65,370	70,577
Housing ....	23,168	322,047	50,898	8,054	10,612
Miners' pensions—Government contribution ....	.....	80,000	80,000	80,000	80,000
Other ....	55,385	48,223	53,135	74,485	54,497
<b>Total ...</b>	<b>5,222,773</b>	<b>1,632,641</b>	<b>1,486,240</b>	<b>1,381,553</b>	<b>1,437,155</b>
<b>Total (State) ...</b>	<b>7,491,059</b>	<b>5,260,669</b>	<b>5,326,886</b>	<b>5,836,068</b>	<b>6,359,982</b>
<b>Commonwealth—</b>					
Age and invalid pensions ....	6,414,899	8,866,699	8,993,577	11,225,455	12,276,711
Funeral benefits ....	.....	37,828	60,788	72,711	84,062
Maternity allowances ....	167,710	888,850	983,453	966,967	1,154,674
Child endowment ....	.....	4,861,657	4,699,888	7,076,691	7,727,859
Widows' pensions ....	.....	1,147,544	1,200,589	1,295,240	1,355,302
Unemployment and sickness benefits	.....	.....	.....	475,216	456,845
Hospital and tuberculosis benefits	.....	.....	.....	14,841	1,473,200
<b>Total (Commonwealth) ...</b>	<b>6,582,609</b>	<b>15,802,578</b>	<b>15,938,295</b>	<b>21,127,121</b>	<b>24,528,653</b>
<b>Grand Total in N.S.W.— (State and Commonwealth)</b>	<b>14,073,668</b>	<b>21,063,247</b>	<b>21,265,181</b>	<b>26,963,189</b>	<b>30,888,635</b>
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<b>Expenditure per head of population—</b>					
By State ....	2 14 9	1 16 7	1 16 9	1 19 0	2 2 11
By Commonwealth ....	2 8 2	5 10 1	5 9 10	7 4 1	8 5 6
<b>Total in N.S.W. ...</b>	<b>5 2 11</b>	<b>7 6 8</b>	<b>7 6 7</b>	<b>9 3 10</b>	<b>10 8 5</b>

\* Exclusive of £1,058,000 advanced by Commonwealth under Hospital Benefits Act (see page 837).

† Exclusive of capital debt charges on loans.

Expenditure by the State Government on health and social amelioration, as shown above, was £6,359,982 in 1946-47, as compared with £7,491,059 in 1938-39; Commonwealth expenditure in New South Wales was £24,528,653 in 1946-47 as compared with £6,582,609 in the earlier year.

State expenditure on health increased from £2,268,286 in the pre-war year to £4,872,827 in 1946-47; the principal items related to hospitals on which expenditure was £1,970,345 and £4,218,342 in the respective years. On the other hand, State expenditure classified under the heading, "Social Amelioration," fell from £5,222,773 to £1,487,155. This decline was due partly to improvement in employment; expenditure on unemployment relief in sustenance and work declined from £2,028,415 to £220,417. Moreover, State schemes of family allowances and widows' pensions were superseded by Commonwealth systems. The State expended £1,363,833 on family allowances and £630,321 on widows' pensions in 1938-39, but only £149,125 in supplementing Commonwealth widows' pensions in 1946-47, when the Commonwealth paid £7,727,859 in child endowment and £1,355,302 in widows' pensions in New South Wales. The higher cost of Commonwealth child endowment is due mainly to two factors, viz., (a) wider scope of benefit—Commonwealth endowment is paid irrespective of family income, whereas family allowances formerly paid by the State Government were subject to a means test (at basic wage standard), and (b) higher rate per endowed child—the Commonwealth rate was increased in June, 1945, from 5s. a week (the maximum rate under the State system) to 7s. 6d.

The increased cost of maternity allowances, as compared with 1938-39, is due to increase in benefits and abolition of the means test in July, 1943. Rates of age and invalid pensions were raised in July, 1945.

#### *National Welfare Fund (Commonwealth).*

The National Welfare Fund was established by the Commonwealth as from 1st July, 1943, to be applied towards the cost of health services, unemployment and sickness benefits, family allowances and other welfare and social services.

In terms of the National Welfare Fund Act, 1943, the fund received from the Commonwealth Consolidated Revenue Fund in 1943-44 and 1944-45, an appropriation representing 25 per cent. of income tax collections from individuals (other than companies), up to a maximum of £30,000,000 per annum.

The Act was amended in 1945 to make provision for appropriations as follows:—

- (a) In 1945-46, £35,000,000 (£15,000,000 from July to December, 1945, and £20,000,000 from January to June, 1946); in 1946-47, £51,000,000; in each year thereafter the amount of social services contribution payable in the year; and
- (b) In 1945-46 and subsequent years, a sum equivalent to payroll tax collections.

The Fund also receives interest on investments of its credit balances.

Social services contribution has been levied on incomes of individual taxpayers, in combination with income tax, as from January, 1946. The sums £20,000,000 and £51,000,000 transferred to National Welfare Fund between January, 1946, and June, 1947, were not actual collections of the contribution in this period, but estimated amounts which the Commissioner of Taxation was required, in terms of the Social Services Contribution Assessment Act, 1945, to treat as social services contribution. Payroll tax, which is payable by employers, was introduced on 1st July, 1941.

Particulars of receipts and total amount of benefits paid from the Fund in New South Wales and elsewhere in each year since it was constituted are shown below:—

TABLE 718.—National Welfare Fund—Receipts and Payments in Australia.

Year.	Receipts.		Benefits Paid.	Credit Balance at 30th June.
	Transfers from Revenue.	Interest on Investments.		
	£	£	£	£
1943-44 ... ..	27,889,572	...	2,364,174	25,525,398
1944-45 ... ..	30,000,000	255,000	2,706,793	53,073,605
1945-46 ... ..	46,499,243	502,383	53,161,609	46,913,622
1946-47 ... ..	64,646,736	455,641	62,021,726	49,994,273

In 1943-44 and 1944-45 benefits paid from the National Welfare Fund in New South Wales and elsewhere consisted of maternity allowances £2,258,838 and £2,542,801 and funeral benefits in respect of age and invalid pensioners £105,336 and £163,992 in the respective years.

Additional benefits were paid from the Fund as from 1st July, 1945; particulars are shown in the following statement.

TABLE 719.—National Welfare Fund—Benefits Paid in Australia—1945-46 and 1946-47.

Year.	Age and Invalid Pensions and Funeral Benefits.	Widows' Pensions.	Maternity Allowances.	Child Endowment.	Employment and Sickness Benefits.	Hospital and Tuberculosis Benefits.
	£	£	£	£	£	£
1945-46 ...	27,146,898	3,247,334	2,492,495	18,019,178	1,144,412	1,111,292
1946-47 ...	29,626,022	3,366,288	3,026,459	19,862,933	1,650,125	4,489,899

## SOCIAL AID SERVICE.

As a means of preventing and relieving distress arising from poverty or unemployment the Government of New South Wales established (towards the end of 1937) a Social Aid Service, with the aim not only of relieving the persons concerned, but, as far as practicable, of improving their health and living conditions and their fitness for employment.

Social welfare bureaux are maintained in the metropolis, Newcastle and the northern and southern coalfields and welfare officers supervise social aid in the various districts with the assistance of departmental medical officers and welfare nurses. The bureaux were conducted in conjunction with the State employment exchanges until March, 1942, when the work of the exchanges was taken over by the Commonwealth.

As a result of wartime expansion in employment there was a gradual decrease in the operations of the Social Aid Service. In 1941 the Commonwealth began to extend the scope of social benefits such as age and invalid pensions and maternity allowances and to provide assistance for widows, dependent children and persons in need owing to sickness or unemployment. Consequently the activities of the State relief organisation in recent years have been limited, for the most part, to the assistance of persons not eligible for Commonwealth benefit.

Since January, 1943, persons eligible for food relief from the State Social Aid Service have received cash payments, usually at fortnightly intervals, on a scale graduated according to the size of the family to be maintained. They receive cash also for additional milk, viz., a pint per day for mothers (before and after childbirth) and for each child under seven years of age.

Supplementary special foods (milk, eggs and green vegetables) are provided for persons certified as being in need of them and special diets for indigent invalids or sick persons. These are distributed by means of orders sent direct to suppliers from whom recipients of aid obtain their requirements—the method used for distribution of all food relief prior to the introduction of cash payments.

As a general condition precedent to the issue of social aid the applicant is required to sign a declaration that his income during the fortnight preceding application did not exceed a certain limit. The scales of benefit and income limits have been varied from time to time; particulars of those in operation from 1st August, 1939, until 7th November, 1946, were published in the previous issue of the Year Book.

The scale of cash benefits was amended in November, 1946, to provide benefits similar to those payable under the Commonwealth Unemployment and Sickness Benefits Scheme. Particulars of the amended scale are as follows:—

TABLE 720.—Food Relief—Scale of Cash Payments—New South Wales, November, 1946.

Family Unit.	Allowable Income.	Maximum Rate of Benefit.	Family Unit.	Allowable Income.	Maximum Rate of Benefit.
	Per fortnight.			Per fortnight.	
Unmarried person—	s.	s.	Adult man or woman ...	s. 40	s. 50
16 and under 17 years ...	10	30	Adult man or woman and one or more dependent children. ...	40	60
17 and under 18 years ...	20	30	Man and spouse ...	40	90
18 and under 21 years ...	30	40	Man and spouse and one or more dependent children.	40	100

Benefit at maximum rate is paid where income does not exceed "allowable income" and the amount is reduced by 2s. per fortnight for every 2s. of income in excess of the allowable income shown above. Under former scales benefit was paid at the full rate appropriate for the family concerned if income did not exceed the "permissible income" according to current scale and persons with higher income were ineligible for benefit. When the new scale was introduced in November, 1946, no reduction was made in cases where benefit was being paid at higher rate under the former scale.



Persons in receipt of pensions and allowances under the age, invalid, widows or (war) service pension schemes are not eligible for cash benefits from the Social Aid Service.

The decline since June, 1939, in the number of persons receiving benefit under the food relief scheme is indicated in the following statement which shows the number of beneficiaries—recipients and dependants—in the last fortnightly period of issue in June each year:

TABLE 721.—Food Relief Recipients, 1939 to 1947.

June—	Recipients and Dependants.	June—	Recipients and Dependants.	June—	Recipients and Dependants.
1939	94,033	1942	16,106	1945	6,532
1940	95,382	1943	8,400	1946	5,471
1941	38,561	1944	5,803	1947	5,177

After a temporary increase in 1940 due to an industrial dislocation in coal mining there was rapid decrease in the number of persons seeking relief. Towards the end of the year 1943 the number of beneficiaries declined to 6,000 and remained near that figure until 1945, when it rose to 6,600 between March and July; the number fell to former level in the next two months. In 1946 the number declined from 5,727 in January to 5,283 in April—the lowest recorded since the system of organised food relief was introduced. In the latter part of this year the number was about 5,500 or somewhat higher and it rose to 6,000 in November and to 6,300 in January, 1947, then declined month by month.

#### CHARITABLE INSTITUTIONS AND SOCIETIES.

The State maintains three homes for the aged and infirm—two for men and one for women. The institutions are used also for the treatment of chronic ailments. They contain special wards for persons suffering from cancer, tuberculosis, and venereal disease, and a hospital for infectious diseases is attached to the institution at Lidcombe.

The average number resident in the State homes during the year 1946 was 2,258. The average cost per inmate was £131 5s. 4d.; receipts from various sources represented £33 0s. 5d. per inmate, so that the net cost to the State was £98 4s. 11d. In the hospitals attached to the institutions 4,042 cases of illness were treated during 1946—males 3,594 and females 448—and at the end of the year 1,255 patients remained under treatment.

A number of societies are active in the matter of charitable relief; some conduct institutions such as homes for children and the aged; others supply casual aid for indigent persons, help for discharged prisoners, shipwreck relief, etc. In many suburbs and country towns benevolent societies have been formed for the relief of local distress.

Charitable societies as a general rule must be registered under the Charitable Collections Act, 1934-1941; it is not lawful for any person to make an appeal for support for any charity unless the charity is registered, or is exempted from registration, under the Act.

Registered charities must be administered by a responsible committee or other body consisting of not less than three persons; proper books of

account must be kept and the accounts are subject to audit and inspection as prescribed. If the provisions of the Act are not observed the charity concerned may be removed from the register.

#### WELFARE OF MOTHERS AND CHILDREN.

The Royal Society for the Welfare of Mothers and Babies, incorporated in 1919, was established with the object of co-ordinating measures for the welfare of mothers and children. The society provides premises in the city for the use as baby health centres, day nurseries and free kindergartens, and conducts training schools, where nurses may receive post-graduate training in infant hygiene and mothercraft. Associations of medical practitioners and of nurses, charitable organisations and institutions for children are affiliated with the Society.

The maternal and baby welfare division of the State Department of Health administers the State health services for mothers and young children, including the baby health centres and a number of pre-natal clinics for the benefit of mothers. A blood donor service with a mobile transfusion unit is available when required for maternity cases, and the advice of a specialist may be obtained, without cost to the patient, for mothers in poor circumstances. A medical committee has been set up for the investigation of maternal deaths and efforts are directed toward the control of puerperal infection by means of compulsory notification of cases. Midwifery nurses are required to register in terms of the Nurses' Registration Act. The subject of maternal mortality is discussed in the chapter *Vital Statistics*.

#### *Maternity Allowances.*

Maternity allowances in respect of births of living or viable children in Australia have been paid by the Commonwealth since 10th October, 1912. Only one allowance is granted where more than one child is born at a birth but, since April, 1944, the allowance has been paid at an increased rate in such cases.

If a child is stillborn or dies within twelve hours after birth, allowance is not payable unless the period of intra-uterine life was at least 5½ calendar months.

The amount of maternity allowance was £5, payable without means test, until July, 1931; then it was reduced to £4 and restricted to claimants whose income did not exceed a prescribed limit.

From August, 1934, the income limit was related to the number of children under 14 years of age in the family (excluding the birth for which allowance was claimed), and the allowance was increased by the addition of 5s. in respect of each such child, to a maximum of £5.

In September, 1936, the allowance was fixed at £4 10s. 0d. if there was no other child under 14 years in the family and £5 in other cases; in January, 1938, the allowance was increased to £7 10s. 0d. where there were at least three such children.

In July, 1943, the income limit was abolished and the allowance was raised to £15 where there is no other child under 14 years of age, £16 where there is one or two such children, and £17 10s. 0d. where there are three or more. Of the allowance as increased, £10 represents benefit at the rate of 25s. a week for four weeks preceding and four weeks following the birth of a child. Since April, 1944, children up to 16 years of age have

been taken into account in determining the amount of allowance and in cases of plural births, £5 is added in respect of each additional child born.

In terms of the Social Services Consolidation Act passed in June, 1947, maternity allowance is paid in respect of births which occur on ships proceeding to Australia or between ports in Australia or Commonwealth Territories, if the mother is residing in Australia at date of claim and intends to remain here. Allowance is not paid in the case of births which occurred outside Australian territorial waters for which the mother is entitled to similar benefit under the law of any other country. Allowance is payable under certain conditions, to qualified Australians temporarily absent from Australia and to aliens and aboriginal natives in Australia.

The following statement shows the number of claims passed for payment in New South Wales (and the Australian Capital Territory), in the years stated, in comparison with the number of confinements:—

TABLE 722.—Maternity Allowances Paid in New South Wales,\*  
1920-21 to 1946-47.

Year ended June.	Amount of Allowance.	Income Limit.	Confinements (approximate).	Claims passed for Payment.	
				Number.	Amount.
	£	£	No.		£
1921 ... ..	5	No limit.	56,200	56,378	281,890
1929 ... ..	5	"	54,900	54,275	271,375
1931 ... ..	5	"	52,100	51,060	258,300
1932 ... ..	4	260	46,700	36,569	149,870
1933 ... ..	4	{ 260 } 208	45,800	31,699	126,740
1934 ... ..	4	208	44,100	29,960	119,750
1935 ... ..	4 to 5	208 to 299	44,500	30,354	130,886
1936 ... ..	4 to 5	208 to 299	46,189	30,463	133,055
1937 ... ..	4½ to 5	221 to 312	48,761	31,086	145,495
1938 ... ..	{ 4½ to 5 } 4½ to 7½	{ 221 to 312 } 247 to 338	48,405	30,440	154,613
1939 ... ..	4½ to 7½	247 to 338	48,925	30,860	167,710
1943 ... ..	4½ to 7½	247 to 338	53,812	19,182	104,188
1944 ... ..	15 to 17½†	No limit.	61,530	57,792	688,850
1945 ... ..	15 to 17½†	"	62,558	61,755	983,453
1946 ... ..	15 to 17½†	"	61,518	60,730	966,967
1947 ... ..	15 to 17½†	"	74,100	73,110	1,154,674

\* Including Australian Capital Territory.

† Plus £5 since April, 1944, where twins or £10 where triplets were born.

The claims granted in the last three years included cases of plural births, viz., cases of twins, 738 and of triplets, nine in 1944-45; twins, 683 and triplets, eleven in 1945-46; twins, 846 and triplets, five in 1946-47. The amount of allowance ranges from £20 to £22 10s. in the case of twins and from £25 to £27 10s. where triplets are born.

#### *Baby Health Centres and Day Nurseries.*

The baby health centres established by the Government of New South Wales are specially concerned with the health of children below school age. A staff of nurses and an honorary medical officer are attached to each centre. The nurses instruct the mothers in hygiene at the centres and in their homes, and make arrangements for medical or dental treatment of mothers and children when necessary.

In December, 1946, there were 257 centres, including 69 in the metropolitan area. Attendances at the centres numbered 1,286,890 in 1945, and 1,176,854 in 1946, and the nurses made 49,071 visits in 1945 and 28,993 in 1946 to cases within the area served by the centres. Expenditure from Consolidated Revenue on baby health centres was £90,466 in 1945-46 and £81,932 in 1946-47.

In many places the baby health centres co-operate with voluntary organisations which make provision for the day care of young children, such as the Day Nursery and Nursery Schools Association, and the Kindergarten Union of New South Wales. Mothers who work outside their homes may leave their children at the nurseries or nursery schools during the daytime. Food, clothing and medical and dental care are provided. A small daily fee is charged.

The Kindergarten Union provides free kindergarten schools and play-grounds and trains kindergarten and nursery school teachers. It co-operates also with the Commonwealth Department of Health in supervising a model pre-school child development centre at Erskineville, Sydney.

In the outlying country districts nurses engaged by the Bush Nursing Association at various centres give assistance to mothers and advise them as to the feeding and treatment of children, and the Far West Children's Health Scheme conducts travelling health clinics. The Society for Crippled Children assists children in the matter of surgical treatment and in vocational training.

#### *School Medical Service.*

The school medical service in New South Wales is under the control of the Director, School Medical Service, Department of Public Health; until February, 1946, it was administered by the Department of Education. The staff in 1946 consisted of 20 medical officers, 14 dental officers, 14 school nurses, 8 dental assistants, 4 psychologists, 3 social workers and a speech therapist.

It is the aim of the School Medical Service that every child be examined at least twice during the period of compulsory school attendance. Metropolitan schools are inspected annually and country schools triennially. An oculist visits schools in outlying districts and prescribes treatment where necessary.

The following summary gives particulars of children medically examined during the year 1943 to 1946:—

	1943.	1944.	1945.	1946.
Number examined	38,983	56,976	46,028	66,047
Number reviewed	21,670	28,032	26,412	22,707
Percentage of those fully examined notified for defects (medical and dental)	39.25	42.80	42.76	41.94

School dental service is provided by 13 dental clinics. In addition to general examination, dental treatment is provided for young children and emergency work is done for children of all ages. The number of children treated during 1946 was 15,691, treatment being completed in 86.5 per cent. of the cases.

The expenditure on the school medical and dental services, exclusive of administration, was £36,173 in 1944-45 and £35,738 in 1945-46.

#### *State System of Family Allowances.*

Family allowances for children under school leaving age in New South Wales were paid by the State Government from 23rd July, 1927, until the commencement of Commonwealth child endowment on 1st July, 1941.

The grant of allowance was subject to a means test. The maximum rate of endowment was 5s. per week per endowable child, and the amount was

reduced by reason of any excess of family income over the living wage, plus £13 per annum for each endowable child. From December, 1929, one child in each family was excluded from endowment.

Particulars regarding the number of claims granted and amount of endowment paid in each year were published in 1940-41 and earlier issues of the Year Book.

*Commonwealth System of Family Allowances.*

The Commonwealth system of child endowment was commenced on 1st July, 1941. Allowances are payable irrespective of the amount of family income for children (including ex-nuptial children) under sixteen years of age (except one in the family), also for children under sixteen years who are inmates of approved charitable institutions. Endowment may be paid in respect of a child of an alien father if the child was born in Australia or the mother is a British subject, or the child is likely to remain permanently in Australia.

The rate of endowment was 5s. per week per endowable child until 26th June, 1945, when it was increased to 7s. 6d. per week.

As a general rule, endowment is paid to the mother. Residence in Australia at date of claim for endowment is a qualification applying to claimants and children and, if not Australian born, residence for twelve months immediately preceding claim; the latter condition may be waived if the Director General of Social Services is satisfied that the claimant and child are likely to remain permanently in Australia. Endowment may be granted to aboriginals unless they are nomadic, or the children concerned are dependent upon State or Federal Government for support.

Child endowment has been payable from the National Welfare Fund since 1st July, 1945, and a sum equivalent to collections of pay roll tax in Australia is paid to the fund in each year. This tax was introduced on 1st July, 1941, simultaneously with commencement of Commonwealth child endowment.

Particulars of Commonwealth child endowment paid in New South Wales during the years 1941-42 to 1946-47 are shown below:—

TABLE 723.—Commonwealth Child Endowment in New South Wales.\*

Year ended June.	Family Claims at 30th June.					Approved Institutions at 30th June.		Endowment paid in N.S.W.* during year.
	Claims in Force.	Number of Endowed Children.		Annual Liability.		Number.	Endowed Children.	
		Total.	Per Claim.	Total.	Per Claim.			
				£	£			£
1942 ...	192,558	356,460	1·851	4,633,980	24·063	67	3,820	4,472,837
1943 ...	194,168	354,883	1·828	4,613,479	23·760	96	5,065	4,580,228
1944 ...	198,651	359,373	1·809	4,671,849	23·518	96	5,324	4,861,657
1945 ...	205,472	365,436	1·779	7,126,002	34·679	106	5,357	4,699,888
1946 ...	211,946	375,395	1·771	7,320,202	34·538	107	5,776	7,076,691
1947 ...	222,668	390,915	1·756	7,622,842	34·233	114	5,776	7,727,859

\* Including Australian Capital Territory.

The increase in annual liability for child endowment as at 30th June, 1945, and in the amount paid in 1945-46 was due to the increase in the rate of endowment from 5s. to 7s. 6d. per week.

In the following statement, endowed families in New South Wales and the Australian Capital Territory in June, 1942 to 1947 are classified according to the number of children under 16 years of age and the number of endowable children in the family. Families with less than two children under 16 years of age are not endowable and are not included in the statement:—

TABLE 724.—Commonwealth Child Endowment—Family Groups in New South Wales,\* 1942 to 1947.

Number of Children under age 16 years in the family.		Number of Endowed Families at 30th June.					
Total.	Endowed.	1942.	1943.	1944.	1945.	1946.	1947.
2	1	102,062	104,608	108,374	114,553	118,132	125,027
3	2	49,426	49,539	50,394	51,708	53,966	57,038
4	3	22,452	22,104	22,246	21,931	22,549	23,052
5	4	10,245	9,977	9,787	9,711	9,816	10,009
6	5	4,893	4,547	4,575	4,334	4,264	4,423
7	6	2,176	2,092	2,029	2,025	2,004	1,876
8	7	896	908	867	849	842	857
9	8	293	256	256	233	227	264
10	9	84	92	80	87	107	95
11	10	25	38	35	32	28	15
12	11	5	6	7	8	9	11
13	12	1	1	1	1	2	1
Total Families ... ..		192,558	194,168	198,651	205,472	211,946	222,668
Children under age 16 years —							
Total (in endowed families)		549,018	549,051	558,024	570,908	587,341	613,583
Endowed ... ..		356,460	354,883	359,373	365,436	375,395	390,915

\* Including Australian Capital Territory.

In July, 1942 there were two, three or four children under age 16 years (including the unendowable child) in 173,940 or 90.3 per cent. of the endowed families and five or more such children in 18,618 or 9.7 per cent. In June, 1947 there were 205,117 families or 92.1 per cent. and 17,551 families or 7.9 per cent. in the respective groups.

Of the children under 16 years of age in endowed families, 442,210 or 80.5 per cent. were in families with two to four such children in 1942, and 513,376 or 83.7 per cent. in 1947.

#### *Widows' Pensions—State (N.S.W.) Scheme.*

A pension scheme for widows and their dependent children was initiated by the Government of New South Wales on 26th March, 1926. The Commonwealth began to pay widows' pensions on 30th June, 1942, and since that date payments under the State scheme have been limited to supplementary allowances for children of widows in receipt of Commonwealth pension. These allowances represent generally the excess of pension in terms of the State Act over Commonwealth pension, which arises from the fact that the Commonwealth scheme does not provide additional pension in respect of more than one child in the family (i.e., the child not eligible for child endowment).

Conditions of eligibility for pension (or children's allowances) as prescribed by the State Act are domicile in New South Wales at date of husband's death and residence in the State at date of application for pension and during the previous three years.

The Act provides for payments to widows with dependent children under age 15 years (or in special circumstances 16 years). Pensions were payable also to certain widows without children, but these have been superseded by Commonwealth pensions.

A widow is not eligible for pension if she is receiving any other pension or allowance exceeding the amount which, if otherwise qualified, she would receive under the State Act; nor if she or her children, individually or collectively, own property exceeding £1,000 in value—apart from their dwelling, furniture and other personal effects.

Until July, 1942, the maximum rates of pension were £1 per week for the widow and 10s. for each eligible child, except in the period dating from 1st February, 1933, to 6th October, 1937, when they were 17s. 6d. and 7s. 9d. respectively. From 1st July, 1942, the maximum rate for the widow was increased from 20s. to 25s. per week. Pension is assessed at maximum rate if the widow's income does not exceed £39 per annum and it is reducible by £1 per annum for each £1 of income in excess of £39.

A widow's income is deemed to include any pension or allowance under any other Act, but not Commonwealth child endowment nor pension under the coal and oil shale mine workers' scheme; earnings of the widow or her children under school-leaving age from personal effort; 5 per cent. of any real or personal property of the widow or her children which produces less than 5 per cent. per annum, except the house in which they reside and the furniture and personal effects therein; any payment for the children's maintenance or education from any estate, etc., and, except in special circumstances, 25 per cent. of the earnings of unmarried children over school-leaving age residing with her. Sick pay or funeral benefits from any society, or insurance benefit on property damaged or destroyed, or contributions of children not residing with the widow are not assessed as income.

The average number of widows' pensions paid by the State in the year ended 30th June, 1942 (the year preceding the introduction of the Commonwealth scheme), was 6,624 per fortnight and the amount was £568,247.

In June, 1947, allowances were payable by the State to 3,997 widows in respect of approximately 8,000 children; payments during the year, 1946-47, amounted to £149,125.

Particulars regarding payments under the widows' pensions scheme of New South Wales during each year since 1942-43 are shown below:—

TABLE 725.—Widows' Pensions—N.S.W.—Allowances for Children.

Year ended 30th June.	Widows receiving allowances for children, 30th June.	Payments during the year.
		£
1943 ... ..	4,604	177,026
1944 ... ..	4,312	167,217
1945 ... ..	3,964	154,398
1946 ... ..	3,972	148,977
1947 ... ..	3,997	149,125

*Widows' Pensions—Commonwealth Scheme.*

The Commonwealth commenced to pay widows' pensions on 30th June, 1942.

The term "widow," for purposes of the pension scheme, includes a woman who though not legally married to him was maintained by a man as his wife for a period of at least three years immediately prior to his death; a wife deserted by her husband for a period not less than six months; a divorced woman who has not remarried; a woman whose husband is in a hospital for the insane, and a woman whose husband is in prison and has been imprisoned for at least six months.

Eligibility for widows' pension is subject to a means test. The residence qualification is residence in Australia at date of claim and for the period of five years immediately prior to that date. Pensions may be granted under certain circumstances to aboriginal women. Aliens, except those who were British subjects prior to marriage, are not eligible.

In computing a claimant's income for the purpose of the means test, the value of benefits, such as, child endowment, hospital and friendly society benefits and State food relief, is excluded; the value of free board and lodging is assessed at not more than 12s. 6d. a week. Moreover, income as assessed for pension is deemed to be reduced by 5s. a week in respect of one dependant child and by 10s. a week for each such child in excess of one, less the amount of any payment (e.g. child endowment) she received for the children. In the case of a deserted wife or divorced woman, any amount in excess of 15s. a week received from the husband for maintenance of a child is included as income.

In computing the value of property owned by a widow, the value of her permanent home, furniture and personal effects, war gratuity and certain other property is disregarded.

Dependent children are those under 16 years of age under custody, care and control of the widow or being maintained by her. (Child endowment is paid for such children, except one in the family). Any child adopted after widowhood (or desertion, etc.), is not taken into account unless maintained by the widow as member of her family on 5th June, 1942.

Widows eligible for pension are classified into four groups as follows:—

*Class A.*—Consists of widows (except Class D) with one or more dependent children. Pension is not granted if the value of the widow's property exceeds £1,000. The maximum rate of pension was 30s. a week from June, 1942. It was increased by 6d. in October, 1942, January, April and August, 1943, and further from 32s. to 37s. 6d. in October, 1945, and to 42s. 6d. in July, 1947. The rate of pension is reduced by the amount of income, apart from pension, in excess of £1 a week (12s. 6d. a week until August, 1946).

Pension payable to a Class A widow may be continued so long as she has a dependent child over 16 years but under 18 years, who is receiving full time education at school or university.

*Classes B and D.*—Class B consists of widows (except Class D) not less than 50 years of age, without dependent child. Class D consists of wives of men imprisoned for at least six months; the wives are eligible for widows' pensions if they have one or more dependent children or are at least 50 years of age. Provision for this group dates from July, 1947.



Pension is not payable to a widow in Class B or D if the value of her property exceeds £650; the property limit was £400 until August, 1946. The maximum rate of pension was 25s. a week in June, 1942, it was increased gradually to 27s. (£70 4s. per annum) by August, 1943 and to 32s. (£83 4s. per annum) in July, 1947. The annual rate of pension is reduced by any excess of income, apart from pension, over £52 (£1 a week), and by £1 for every £10 of property not exceeding £400 and £1 for every £7 of the balance over £400; income limit was £32 10s. (12s. 6d. a week) until August, 1946.

Pensioners in Classes B and D who are not less than 50 years of age and are inmates of an approved benevolent asylum are paid so much of their pensions as does not exceed 11s. a week and the balance is paid to the institution for their maintenance.

*Class C.*—The widows in this group have no dependent children and are less than 50 years of age and in necessitous circumstances. Pension is payable for not more than six months following the husband's death. The rate of pension was the same as for Class B widows until October, 1945. It was increased by 5s. to 32s. 6d. a week from this date and to 37s. 6d. from July, 1947.

Particulars of Commonwealth widows' pensions paid in New South Wales (and the Australian Capital Territory) are shown below:—

TABLE 726.—Commonwealth Widows' Pensions in New South Wales.

Year ended 30th June—	Pensions Current at 30th June.								Payments during the Year.
	Class A.		Class B.		Class C.		Total Widows Receiving Pension.		
	Number.	Average Weekly Rate.	Number.	Average Weekly Rate.	Number.	Weekly Rate.	Number.	Average Weekly Rate.	
		s. d.		s. d.		s. d.		s. d.	£
1943	7,519	30 3	7,439	24 7	40	26 6	14,998	27 5	949,283
1944	7,344	30 10	8,990	25 3	46	27 0	16,380	27 9	1,147,544
1945	6,924	30 9	10,051	25 3	47	27 0	17,022	27 6	1,200,589
1946	7,096	36 2	10,218	25 2	41	32 6	17,355	29 8	1,295,240
1947	7,456	36 2	9,055	25 5	61	32 6	16,572	30 3	1,355,302

\* Including Australian Capital Territory.

The decline in the number of widows' pensions during 1946-47 was due mainly to transfers to age pensions of widows in Class B who were aged at least 60 years. The rate of age pensions is higher than the rate payable to widows in this group.

#### *Activities of the Department of Child Welfare.*

The care of children under the supervision of the State is a function of the Department of Child Welfare in terms of the Child Welfare Act, 1939.

The Director of Child Welfare is the permanent head of the department and there is an Advisory Council to advise the Minister upon matters relevant to the welfare of children.

Social workers for the Department are trained in child welfare work at the University and by means of courses of study specially arranged for them. By the Child Welfare Act provision is made for the care

and maintenance of State wards, the assistance of children of necessitous parents and the supervision of children in foster homes and in institutions, for protecting children from ill-treatment and neglect, preventing their employment in dangerous occupations and regulating the adoption of children and their employment in public performances and in street trading. Special courts, called Children's Courts, are maintained to deal with offences committed by or against children and to adjudicate in regard to affiliation proceedings.

Other Acts having special reference to the welfare of children are the Deserted Wives and Children Act, 1901-1939, described below, and the Guardianship of Infants Act, 1934, by which, in legal disputes as to guardianship, the mother is accorded equal rights with the father.

The use of tobacco by juveniles and the supply of intoxicating liquor to them are prohibited by the Juvenile Smoking Suppression Act and the Liquor Act, respectively. A period of compulsory school attendance, viz., from 6 to 15 years of age, is prescribed by the Public Instruction Act.

#### *State Wards.*

In terms of the Child Welfare Act children may be admitted to control as State wards upon application by parents or other guardians where the conditions of home life are unsatisfactory or the children are orphaned or deserted. Neglected or uncontrollable or delinquent children may be admitted by order of the Children's Courts.

The Minister for Education is the guardian of State wards. His guardianship terminates usually at 18 years, but in certain cases supervision may continue until the age of 21 years.

Where practicable, State wards are placed with approved foster parents to be maintained under normal conditions of home life. Allowances are paid to the foster parents, and medical, dental and other special expenses, such as equipment for school or employment, are met by the Department. The allowances may be continued beyond normal school-leaving age to enable backward children to remain at school and those with special scholastic ability to complete courses at secondary or technical school or University, also in cases of ill-health or physical disability. Departmental inspectors exercise supervision over wards placed with foster parents.

Earnings of wards placed in employment after they leave school may be supplemented by the Department.

The Department of Child Welfare maintains depots for the temporary accommodation of State wards pending placement with foster parents or transfer; homes where boys are trained in farm work and girls in domestic science; welfare homes for subnormal children, homes for sick or invalid wards, for babies and for prenatal and post-natal care of mothers. The establishments for State wards in 1946-47 consisted of thirteen hostels and homes and two training schools.

For mentally deficient children who are educable the Department of Education also provides special classes at some State schools and conducts a residential school at Glenfield.

#### *Children in Foster Homes.*

Children may be placed by their guardians in foster homes or institutions conducted by religious bodies and other organisations in preference

to being boarded out as State wards. Under certain conditions the Minister is authorised to pay to charitable institutions in respect of the children allowances similar to those paid to foster parents of State wards. Allowances may be paid to institutions which were in existence when the Child Welfare Act commenced in December, 1939, for the number of inmates in excess of the average number during the period of two years immediately before that date.

Any place used for the reception of one or more children under 7 years of age apart from their parents must be licensed and the children must be registered with the Director of the Child Welfare Department.

The reception of children in foster homes, other than the foster homes of State wards and institutions controlled or open to inspection by the State, is subject to general regulation in terms of the Child Welfare Act.

It is prescribed that no person without an order of a Children's Court, may receive a child under 7 years of age to be maintained apart from its mother or other parent in consideration of the payment of money otherwise than by way of periodical instalments. Moreover, no such instalment may be paid for more than four weeks in advance, nor exceed the sum of 50s. per week.

The number of foster homes licensed in 1946-47 was 222, and the number of children registered was 315. During the year 70 children were discharged to their parents, 38 were removed from State supervision for other reasons and 207 remained in the foster homes at the end of the year.

#### *Relief of Children of Necessitous Parents.*

An important activity of the Child Welfare Department relates to the maintenance in their own homes of the children of necessitous parents. Allowances for the purpose are paid to the mother or father who is widowed or deserted or whose spouse is incapacitated, in gaol or an old-age pensioner. Relief in this form is granted also for the children or adopted children of single women. As a general rule payment ceases when the child reaches school leaving age, but may be continued to 18 years if the child is incapacitated or for other special reason.

In the year ended June, 1947, contributions were paid by the Department to 2,917 mothers for the support of 7,263 children.

#### *Adoption of Children.*

Legal provision is contained in the Child Welfare Act for the permanent adoption of children upon order of the Supreme Court in its equitable jurisdiction. Application to the court may be made by adopting parents or by the Minister of Public Instruction on their behalf. If over 12 years of age, the child's consent to adoption is necessary, unless the court dispenses with it owing to special circumstances.

An order of adoption terminates all rights and liabilities between the child and his natural parents, except the right to inherit property by reason of kinship. An adopted child takes the surname of his adopting parent in substitution for his own surname; orders of adoption are registered by the Registrar-General.

The number of children adopted was 1,332 in 1944-45, 1,190 in 1945-46, and 1,641 in 1946-47.

*Delinquent Children.*

Cases of juvenile offenders under the age of 18 years are dealt with in the Children's Courts by magistrates with special qualifications for the treatment of delinquent children. No child under the age of 8 years is held responsible for an offence, and the sentence of death may not be pronounced or recorded against a person under the age of 18 years.

Children committed to institutions may be detained in custody until the expiration of the period specified by the Court, or until reaching the age of 18 years. Committal to an institution is a final resort and many of the children brought before the courts are released after admonition, or on probation. The Child Welfare Department exercises control of delinquent children committed to State institutions and supervises those released on probation.

There are six shelters and hostels for the reception and temporary detention of delinquent children, also farm homes for delinquent boys at Mittagong and Gosford and training schools for girls at Parramatta and Thornleigh. There is a special school at Burradoo for truants.

*Deserted Children.*

In cases of desertion of wife or of legitimate children, the husband or father may be ordered, in terms of the Deserted Wives and Children Act, to pay periodical contributions for their support. In cases relating to ex-nuptial children the father may be ordered, under the Child Welfare Act, to pay the expenses incidental to birth and periodical contributions for maintenance. In certain cases mothers may be required to contribute towards the support of their children.

A wife who has been deserted by her husband, without just cause, for a period of six months is eligible to apply for widow's pension in terms of the (Commonwealth) Social Services Consolidation Act, 1947.

Legislation has been enacted to provide for reciprocity in respect of orders for maintenance between New South Wales and other parts of the British Empire.

The following statement shows the number of applications for maintenance of wife or child dealt with in the Courts of Petty Sessions and the Children's Court during the years 1941 to 1947:—

TABLE 727.—Wife and Child Desertion—Applications for Maintenance Orders, 1941 to 1947.

Year.	Applications for Orders.					
	Maintenance of—				Expenses incidental to Birth of ex-nuptial Child.	
	Wife.		Child.			
	Total Cases.	Orders Made.	Total Cases.	Orders Made.	Total Cases.	Orders Made.
1941 ... ..	2,434	1,394	536	416	135	83
1942 ... ..	1,999	1,091	456	333	116	87
1943 ... ..	1,953	1,108	500	376	145	100
1944 ... ..	2,438	1,402	798	591	84	56
1945 ... ..	2,548	1,469	892	681	96	70
1946 ... ..	3,823	2,217	1,334	1,018	95	64
1947 ... ..	3,243	1,772	1,136	900	104	72

For disobedience of or non-compliance with the orders offenders may be fined, or they may be committed to prison, and from the value of their work while in prison the cost of their upkeep may be deducted and the balance applied to the satisfaction of the orders.

*Children under State Supervision.*

The number of children under the supervision of the Child Welfare Department in December, 1931, and in June, 1939 and later years is shown below:—

TABLE 728.—Children under State Supervision.

Classification.	1931.	1939.	1941.	1944.	1945.	1946.	1947.
State wards—							
Boarded out, adopted or apprenticed ... ..	5,054	3,643	3,271	2,511	2,312	2,141	2,006
In depots, homes or hostels	230	333	376	404	460	576	626
Juvenile offenders in State institutions or shelters ...	1,009	679	537	654	643	594	588
Children boarded out with own mothers ... ..	11,184	9,787	8,539	6,143	6,410	6,318	7,263
In licensed foster homes and institutions ... ..	1,191	1,207	1,128	1,284	1,382	1,615	1,841
Total ... ..	18,668	15,649	13,851	10,996	11,207	11,244	12,324

These figures do not include the children on probation from the Children's Courts or institutions, nor children licensed for street trading, or for employment in theatres or public entertainments.

The number of State wards at 30th June, 1947, was 2,632, viz., 1,422 boys and 1,210 girls. Of these 626 were in depots, homes or hostels, 1,648 were boarded out and supported by the Government, 268 were adopted or boarded out without subsidy and 90 were apprenticed.

Between June, 1939, and June, 1947, there was a decline of 1,344 in the number of State wards and a reduction of 2,524 in the number of children boarded out with their own mothers.

The annual expenditure of the Child Welfare Department during the past seven years is shown below:—

TABLE 729.—Child Welfare Department—Expenditure.

Year ended June.	Boarding out.	Payments for Children in their own homes.	Institutions, Homes, Hostels, etc.	Salaries.	Miscellaneous.	Total Expenditure.	Contributions by Parents and other Revenue.	Net Expenditure.
	£	£	£	£	£	£	£	£
1941 ...	72,406	221,895	44,423	102,381	13,986	455,091	27,386	427,705
1942 ...	67,294	200,153	45,952	104,410	13,294	431,103	28,669	402,434
1943 ...	60,363	157,892	58,947	102,451	13,153	392,806	32,174	360,632
1944 ...	56,616	143,259	67,832	111,008	15,156	393,871	44,760	349,111
1945 ...	50,799	144,216	89,799	123,300	18,077	426,191	39,910	386,281
1946 ...	46,283	139,216	88,964	141,035	19,867	435,365	43,417	391,948
1947 ...	43,511	156,411	82,405	174,912	24,014	481,253	33,800	447,453

## TREATMENT OF SICKNESS.

Institutions for the treatment of sickness and disease are private hospitals which are owned by private persons and conducted as business enterprises; public hospitals which are maintained by the State, or by the people resident in the districts in which the hospitals are located, with the assistance of subsidy from the public funds, or by charitable organisations; special hospitals, State and private, for the treatment of mental and nervous ailments; and a State lazaret.

The State exercises a measure of supervision over the practice of professional persons engaged in the treatment of sickness and disease. Medical practitioners, dentists, pharmacists, optometrists and, since November, 1946, physiotherapists are required to register with a board established for each profession under statutory authority.

The number of registered medical practitioners, dentists, pharmacists and optometrists at the end of various years since 1929 is shown below:—

TABLE 730.—Medical Practitioners, Dentists, Pharmacists and Optometrists on Register, 1929 to 1947.

Year.	Number on Register at 31st December.			
	Medical Practitioners.	Dentists.	Pharmacists.	Optometrists.
1929	3,124	1,416	1,843	*
1932	3,179	1,415	1,889	645
1939	3,598	1,495	2,281	598
1940	3,558	1,483	2,327	583
1941	3,744	1,455	2,383	557
1942	3,899	1,447	2,231	554
1943	4,003	1,431	1,877	549
1944	4,101	1,452	1,872	548
1945	4,207	1,445	1,892	554
1946	4,335	1,483	1,981	551
1947	4,589	1,470	2,027	543

\* Not registered.

The number of physiotherapists on the register at 31st December, 1947, was 420.

In December, 1947, a number of persons (other than pharmacists) were licensed to deal or manufacture drugs, etc., as follows: 330 to deal in poisons, 20 to manufacture opium and other dangerous drugs and 87 to distribute such drugs.

Nurses are required to register in terms of the Nurses Registration Act, 1924, and amendments. Four classes of nurses may be registered, viz., general, mental, midwifery and infants'. In the case of midwifery nurses, registration must be renewed annually.

Information is not available as to the actual number of registered nurses, as many are registered under more than one classification. Moreover,

provision is not made for recording all exits by reason of death, departure from New South Wales or other causes, and many who are registered are no longer engaged in nursing. The number of new registrations of the various classes of nurses in each year 1938 to 1947 is shown below:—

TABLE 731.—Nurses—New Registrations, 1938 to 1947.

Year.	New Registrations during the Year.			
	General.	Midwifery.	Mental.	Infants'.
1938	753	311	61	6
1939	794	305	72	9
1940	770	279	70	10
1941	792	307	63	4
1942	888	309	43	7
1943	780	325	67	8
1944	736	382	69	7
1945	888	399	78	1
1946	974	372	62	...
1947	1,053	611	58	2

New registrations in any year include some nurses who were registered under another classification in an earlier year.

For the treatment of sickness and accident in sparsely populated districts, the Government subsidises medical practitioners with a view to encouraging them to practise in outlying bush settlements. Subsidies amounted to £13,347 in 1946-47.

Aerial medical services, subsidised by the Commonwealth and State, are provided at a number of inland centres in Australia including Broken Hill, and two organisations, the Bush Nursing Association and the Country Women's Association, make provision for nurses in country localities and maintain cottage homes in a number of remote localities.

The District Nursing Association engages nurses to visit the sick, gratuitously if needed, in the metropolitan district.

Ambulance transport services for sick and injured persons are controlled by a Board, incorporated in 1919. The Board delimits certain districts for administrative purposes, and in each district a committee is elected annually by the contributors to its funds. The Board receives an annual grant, as appropriated from Consolidated Revenue, for the services; the amount was £40,000 in 1945-46. The number of cases transported and the mileage travelled in recent years were as follows: 259,168 cases, 2,689,564 miles in 1943-44; 284,124 cases, 3,058,230 miles in 1944-45 and 307,093 cases, 3,473,736 miles in 1945-46.

#### HOSPITAL SERVICES.

##### *Private Hospitals.*

A private hospital may not be conducted except under license in accordance with the Private Hospitals Act by which it is prescribed that every private hospital must be under the direct control of a person approved by the Board of Health. Licensees are required to comply with regulations as to structure, management and inspection. The licenses are issued annually.

The classification of the private hospitals and their accommodation, according to the nature of the cases received, are shown in the following statement:—

TABLE 732.—Private Hospitals—Number and Accommodation, at 31st December, 1939 to 1946.

Year.	Private Hospitals.				Number of Beds.			
	Medical, Surgical, and Lying-in.	Medical and Surgical.	Lying-in.	Total.	Medical, Surgical, and Lying-in.	Medical and Surgical.	Lying-in.	Total.
1939 ...	258	51	228	537	3,286	989	979	5,254
1944 ...	187	50	151	388	2,467	1,000	736	4,203
1945 ...	178	52	134	364	2,438	1,005	663	4,106
1946 ...	173	55	120	348	2,391	1,036	599	4,026

The number of private hospitals has declined in each year since 1939, when there were 537 with 5,254 beds, viz., 203 with 2,939 beds in Sydney and 334 containing 2,315 beds in other localities. In 1946 there were 144 private hospitals with 2,494 beds in Sydney and 204 with 1,532 beds in other districts.

#### *Public Hospitals.*

Institutions for the care of the sick are classed as public hospitals, unless they are owned and maintained entirely by private persons. Some are maintained wholly by the State, viz., a convalescent hospital in the metropolitan area, the Sanatorium for Consumptives at Waterfall, the David Berry Hospital at Berry and the hospitals attached to the homes for the infirm (see page 819). Hospitals conducted by the Commonwealth Department of Repatriation are not classified as public hospitals.

Some of the public hospitals are under the ægis of religious denominations, and are conducted by religious communities who own the establishments or by committees nominated by subscribers.

By the Public Hospitals Act, 1929-1943, provision has been made for a systematic organisation of the public hospital services. The Act is administered by the Hospitals Commission, as reconstituted in terms of an amending Act passed in December, 1943. It consists of three full-time members, including the chairman, appointed by the Governor for a term of seven years and remunerated by annual salary.

The public hospitals and organisations which provide district and bush nursing services and aerial medical services are classified in two main groups, according to the schedules of the Public Hospitals Act. One group, termed the "incorporated hospitals," consists entirely of suburban and country hospitals incorporated by the Act. The second group, known as "separate institutions," includes the large general hospitals in or around the metropolis; the hospitals of the Benevolent Society of New South Wales and the Australian Red Cross Society; the hospitals for children, tubercular cases, convalescents or incurables; the dental hospital; the hospitals conducted by religious organisations; and the Australian Aerial Medical Services (New South Wales section).



Each incorporated hospital is managed by a board consisting of four directors appointed by the Government and five or six elected triennially by persons who contribute to the funds of the hospital as members of a contribution scheme or otherwise (except by way of payment for relief) or by a board of five Government nominees and six or seven elected directors.

The Hospitals Commission determines which hospitals shall be subsidised, and the amount of subsidy to be paid to each institution.

Prior to the introduction of the Hospital Benefits Scheme (see page 837) public hospitals were required to provide treatment, medicines, etc., for necessitous persons, but other patients might be charged a reasonable sum for hospital services and such sum was recoverable in the courts of law. While the Hospital Benefits Agreement with the Commonwealth is in force the public hospitals concerned may not charge fees for treatment of qualified persons in public wards and charges in non-public wards must be reduced by the amount of benefit.

If authorised by the Commission, portion of a public hospital may be set aside for paying patients, who may contract for private or intermediate accommodation. At 30th June, 1946, the number of beds in public hospitals included 13,804 in public wards, 1,071 for private and 2,465 for intermediate patients.

Special facilities for dental treatment are provided at the Dental Hospital, Sydney, and at other public hospitals in Sydney and Newcastle, and by dental clinics which are transported by train through country districts.

Particulars relating to the accommodation provided in hospitals under the supervision of the Hospitals Commission and the number of patients treated are shown below:—

TABLE 733.—Public Hospitals—Accommodation and Patients,  
1938-39 to 1945-46.

Year ended June—	Hospitals.	Beds.		Patients treated in Hospital.		Out-Patients.	
		Number Available.	Number occupied. Daily Average.	Babies born.	Other.	Number.	Atten- dances.
1939... ..	208	14,246	10,866	13,218	237,326	605,700	1,772,299
1940... ..	210	14,972	11,025	15,089*	249,854*	595,325	1,819,984
1941... ..	209*	15,688*	11,578	17,530	264,509	618,199	1,895,581
1942... ..	213	16,111*	11,063	20,169*	258,592	587,976	1,778,545
1943... ..	212	16,112	11,375	21,254	270,215	590,554	1,764,512
1944... ..	214	16,820	12,218	24,937	280,372	598,489	1,823,422
1945... ..	218	16,953	12,901	28,600	295,671	635,960	1,985,196
1946... ..	223	17,340	12,495	30,587	294,586	678,408	2,048,737

\* Revised.

In addition to the accommodation provided by public hospitals to which the foregoing particulars relate, beds in the State hospitals, viz., those at the homes for the infirm (see page 819), the Waterfall Sanatorium and auxiliary hospital at Randwick, and the David Berry Hospital, numbered 2,018 in 1945 and 2,069 in 1946. The average number of beds occupied

per day in these institutions was 1,753 and 1,729, and the number of patients treated was 5,453 and 5,023 in the respective years.

*Income and Expenditure of Public Hospitals.*

Particulars relating to the income and expenditure for maintenance of the public hospitals during the eight years ended June, 1946 are shown below. Income and expenditure of State institutions are not included:—

TABLE 734.—Public Hospitals—Income and Expenditure, 1938-39 to 1945-46.

Year ended June—	Income for Maintenance.					
	State Aid for Main- ten- ance.	Subscrip- tions and Donations.	Systematic Contribu- tions.	Patients' Fees.	Other.	Total Income for Maintenance.
	£	£	£	£	£	£
1939 ... ..	1,029,774	163,869	363,788	578,343	80,423	2,216,197
1940 ... ..	1,035,753	183,583	375,886	657,972	88,386	2,341,580
1941 ... ..	1,140,345	197,802	393,677	813,641	103,827	2,649,292
1942 ... ..	1,347,777	192,943	465,307	842,995	102,225	2,951,247
1943 ... ..	1,363,013	193,439	525,982	986,302	135,738	3,204,474
1944 ... ..	1,453,117	238,887	586,214	1,106,779	120,387	3,505,384
1945 ... ..	1,728,897	241,931	630,747	1,200,758	122,227	3,924,560
1946 ... ..	2,083,694	233,778	623,114	1,236,655	139,190	4,316,431
	Maintenance Expenditure.					
	Salaries and Wages.	Provisions, Drugs, Fuel, etc.	Special Department. Expenses and Interest.	Renewals and Renova- tions.	Total.	
	£	£	£	£	£	
1939 ... ..	1,196,490	718,539	276,535	91,190	2,282,754	
1940 ... ..	1,284,726	758,832	299,122	89,259	2,431,939	
1941 ... ..	1,373,252	804,954	315,257	105,489	2,598,952	
1942 ... ..	1,519,322	880,178	319,057	123,655	2,842,212	
1943 ... ..	1,723,329	949,743	346,249	136,228	3,155,549	
1944 ... ..	1,977,347	1,049,763	372,362	171,147	3,570,619	
1945 ... ..	2,189,375	1,210,241	400,482	173,872	3,973,970	
1946 ... ..	2,510,800	1,354,457	407,219	186,948	4,459,424	

The amounts shown above are exclusive of loan receipts and loan expenditure.

HOSPITAL BENEFITS.

*Hospital Contribution Funds.*

The Hospitals Contribution Fund of New South Wales provides certain hospital benefits on a contributory basis in respect of treatment in public and licensed private hospitals.

The fund originated in 1932 as the Metropolitan Hospitals Contribution Fund; a joint scheme for hospitals in the metropolitan district.

Systematic contribution schemes were organised also in connection with a number of country hospitals. In view of the introduction of the Commonwealth hospital benefits scheme (see below) the country funds were terminated on 30th June, 1946 and the scope of the Metropolitan Fund was extended to cover the whole State.

The rate of contribution to the Fund is 6d. per week for the contributor and his wife and children under 17 years of age or 3d. for single minors, single women or widows. The maximum period of benefit in any twelve months is 70 days. Under certain conditions, members may contribute at double the rates stated above for higher benefit available to persons under 65 years of age. Since 1st April, 1947, persons over age 65 years have not been admitted as new members.

Details regarding the operations of the Fund during the nine years ended June, 1939 to 1947 are shown in the following statement:—

TABLE 735.—Hospitals Contribution Fund, 1938-39 to 1946-47.

Year ended 30th June.	Benefits Granted to Contributors.	Income.	Payments to Hospitals and Claimants.	Administrative Expenses.
	No.	£	£	£
1939	50,561	288,211	252,579	28,133
1940	55,065	320,324	272,514	30,530
1941	58,898	331,554	298,247	31,840
1942	60,095	364,181	300,621	37,198
1943	64,694	386,720	338,808	42,292
1944	74,490	422,156	377,230	44,431
1945	81,846	440,549	414,665	46,190
1946	82,827	452,898	427,992	49,576
1947	88,145	529,542	394,325	61,960

#### *Commonwealth Hospital Benefits.*

A scheme of hospital benefits has been established in Australia in terms of the Hospital Benefits Act, 1945, passed by the Commonwealth Parliament in October, 1945.

Persons ordinarily resident in Australia at time of admission to public or approved private hospital are eligible for hospital benefit. Provision was made by an amending Act of 1947 to extend the benefit under certain conditions, as from 1st July, 1946, to Australian residents temporarily abroad and their dependants.

Benefit in respect of patients in public hospitals, including State hospitals, is provided under agreement between the Commonwealth and State. In New South Wales the agreement was authorised by the Hospital Benefits Agreement Act, 1946. The Commonwealth has agreed to pay to the State financial assistance in respect of beds occupied by qualified

persons in public hospitals at the rate of 6s. per day per occupied bed. The State has agreed to ensure that patients in public wards receive free treatment, without the application of a means test, and that charges payable by patients in non-public wards are reduced by 6s. per day.

The amount which the State receives from the Commonwealth in each year in respect of beds in public wards is to be distributed to the public hospitals as follows:—(a) A sum, to be used for maintenance, based on the average amount per occupied bed actually recovered from patients in such wards in the years ended June, 1943 and 1944, and (b) a sum to recoup any diminution in the year in donations (including voluntary contributions) as compared with those received by the hospitals and used for maintenance in 1942-43 and 1943-44; the balance is for capital expenditure on public hospitals as approved by the Commonwealth.

Benefit is provided by the Commonwealth in respect of patients in approved private hospitals in accordance with regulations under the Hospital Benefits Act. The amount of benefit at the rate of 6s. per day is deducted from the accounts rendered to patients and is paid to the proprietors by the Commonwealth Department of Health. Approval or renewal of approval of a private hospital may be granted by the Commonwealth Minister for Health, upon application by the proprietor, for a period not exceeding a year and may be revoked at any time.

Charges payable by qualified patients in public or private hospitals are not to be increased above the rates current at 1st September, 1945, without approval of the Commonwealth.

The benefit scheme for patients in public hospitals in New South Wales commenced on 1st July, 1946. During the year 1946-47, the State received from the Commonwealth, in terms of the agreement, tentative advances amounting to £1,340,000 for maintenance and capital expenditure.

Benefits commenced in approved private hospitals on 18th February, 1946, but proprietors of many private hospitals in New South Wales had not, at 30th June, 1947, applied for approval and patients treated therein were not eligible for benefit. Payments by the Commonwealth to private hospitals in New South Wales amounted to £14,841 in 1945-46 and £124,983 in 1946-47.

#### *Medical Benefits Fund.*

A scheme of medical benefits, the Medical Benefits Fund of New South Wales Limited, sponsored by the British Medical Association, was initiated in August, 1947.

Benefits are provided for contributors and eligible dependants in respect of the cost of treatment by registered medical practitioners in private practice. Persons over 65 years of age are not admitted as contributors and membership ceases at age 65 years unless the member has contributed for five consecutive years before attaining that age.

The weekly rate of contribution is 1s. for single persons under 21 years of age; 1s. 6d. for unmarried adults and widowed persons without dependants; and 3s. for widowed persons with dependants and for married persons. Dependants are husband or wife and children under 17 years of age.

Benefits include payments towards fees for general practitioner services up to £15 15s. for any person in a year, at the rate of 7s. 6d. for each

attendance, or, if in a consultative capacity, £1 1s. or £1 11s. 6d. per consultation. Benefits are provided also for specialist services, surgical treatment, obstetric treatment, physiotherapy, diagnostic services and anaesthetists' fees.

Administrative work for the collection of contributions and payment of benefits is undertaken by the Hospitals Contribution Fund of New South Wales described above.

#### *Pharmaceutical Benefits.*

Legislation was passed by the Commonwealth Parliament in 1944 and 1945 to make provision for pharmaceutical benefits but was declared by the High Court of Australia to be invalid on constitutional grounds. Following a referendum on 28th September, 1946, Commonwealth powers in respect of social services were enlarged and the Pharmaceutical Benefits Act was re-enacted with amendment in June, 1947. The Act was brought into operation on 1st June, 1948.

In terms of the Act medicines and certain materials and appliances listed in a prescribed formulary are available free of charge on prescription by a medical practitioner. Persons ordinarily resident in the Commonwealth are entitled to receive pharmaceutical benefits from approved pharmaceutical chemists and friendly society dispensaries or, in respect of patients, from approved hospitals. The suppliers are paid by the Commonwealth.

Pharmaceutical benefit is not provided under the Act in respect of patients in public wards of public hospitals, who are receiving free treatment in terms of the Hospital Benefits Act, but benefit at the rate of 10d. per day is paid to these hospitals in respect of in-patients in non-public wards. In respect of registered out-patients benefits paid to public hospitals is 3s. 3d. for each period of registration. An out-patient registered in any financial year is deemed to be registered again if still under treatment at beginning (1st July) of the next financial year; an out-patient is not counted as an additional patient for benefit if, having been discharged upon completion of treatment, he is registered again at the same hospital within thirty days.

#### TREATMENT OF COMMUNICABLE DISEASES.

Within the State, the Board of Health is vested with authority to make provision for the treatment and prevention of infectious diseases. The Federal Government is responsible for the administration of the quarantine laws in respect of vessels, persons, and goods arriving from overseas ports.

Cases of such diseases as leprosy, bubonic plague, smallpox, scarlet fever, typhoid fever, diphtheria, infantile paralysis, cerebro-spinal meningitis, puerperal infection, typhus, yellow fever, cholera, pulmonary tuberculosis, encephalitis lethargica, anthrax, and undulant fever, must be notified to the Board of Health.

The following table shows the notifications of various diseases in 1937 and later years. There are few notifications in New South Wales of such diseases as leprosy, bubonic plague, anthrax or undulant fever, and such cases are not included in the statement. Particulars of deaths and death rates are shown in the chapter "Vital Statistics."

TABLE 736.—Infectious Diseases—Cases Notified, 1937 to 1946.

Year.	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Diph- theria.	Pulmon- ary Tuber- culosis. *	Infantile Paralysis.	Cerebro- Spinal Menin- gitis.	Ence- phalitis Lethar- gica.	Puerperal Infection.
1937	5	118	2,493	4,244	1,771	70	17	9	241
1938	7	91	2,599	3,935	1,797	658	22	11	259
1939	...	63	3,190	4,103	1,687	33	22	6	243
1940	5	67	3,026	1,838	1,907	11	41	7	245
1941	10	40	3,385	3,063	1,916	90	411	13	270
1942	8	31	1,576	1,454	1,912	34	879	12	244
1943	16	24	3,940	2,268	1,722	25	400	8	224
1944	33	24	5,618	1,402	1,743	15	172	3	205
1945	26	29	6,977	1,478	1,688	668	117	3	151
1946	43	25	3,090	1,279	1,671	656	89	3	185

\* All forms of tuberculosis since 14th May, 1945.

The marked increase in the number of notifications of pulmonary tuberculosis in 1940 was a result of the medical examination of recruits for war service which brought to light many cases which otherwise would not have been notified at this stage. Consequently the number of notifications exceeded 1,900 per annum in the years 1940 to 1942, then declined.

*Leprosy.*

Persons suffering from leprosy are segregated in the Leper Lazaret. Particulars regarding the number of patients and the cost of the lazaret during the five years 1942 to 1946 are shown below:—

TABLE 737.—Leper Lazaret—Patients and Cost.

Year.	Number of Patients.					Cost of Maintenance.
	Admitted.	Died.	Discharged.	Repatriated.	At end of year.	
1942	5	...	...	...	13	£ 4,567
1943	8	1	2	...	18	6,019
1944	7	...	1	...	24	6,530
1945	3	1	6	3	17	7,318
1946	6	2	3	1	17	7,357

The birthplaces of inmates at the end of 1946 were: Australia, 11; Malta, 4; Fiji and Singapore, 1 each.

*Tuberculosis.*

Pulmonary tuberculosis has been notifiable throughout the State since 1st March, 1929, and all forms of tuberculosis since May, 1945. During the year 1945 the notifications numbered 1,688, viz., 1,280 in the metropolitan sanitary district, 97 in the Hunter River district, 18 in the district of Broken Hill, and 293 in other parts of the State. In 1946 notifications numbered 1,671, including metropolitan, 1,287, Hunter River district 80, Broken Hill 17, other districts 287.

A special Division of Tuberculosis was formed in the Department of Health to co-ordinate measures for the cure and prevention of the disease, to regulate the admission of patients to institutions, to investigate condition of homes and places of employment of tuberculous persons, to arrange for the examination of contacts and to undertake publicity in regard to tuberculosis.

The Commonwealth Government has made provision in terms of the Tuberculosis Act 1945-1946, to pay financial assistance to the States for the improvement of means of combating tuberculosis.

The Commonwealth may subsidise, on £ for £ basis, expenditure by the States for the maintenance of new diagnostic facilities and new after-care facilities for treatment of tuberculosis. The Commonwealth will grant to the States subsidy at the rate of 6s. per day per occupied bed in approved tuberculosis hospitals established after the commencement of the Act and conducted by a State Government or a governmental authority, provided that no charge is made for accommodation and treatment in public wards of such hospitals.

Moreover, the Commonwealth will pay to each State, grants up to a maximum of £250,000 per annum for all States, to be applied in providing allowances for persons suffering from tuberculosis or the dependants of such persons. The objects of the allowances are to minimise the spread of tuberculosis, to promote better treatment and to encourage sufferers to take treatment. Payment of allowances, at rates fixed according to financial resources and family responsibilities, was commenced in New South Wales on 2nd January, 1947. The allowances are administered by the Tuberculosis Allowances Committee which consists of representatives of the State Treasury, the Department of Public Health, and the Department of Labour and Industry and Social Welfare. The amount of allowances paid in New South Wales was £8,217 in 1946-47.

Institutions for the care of patients suffering from tuberculosis have been established by the Commonwealth and State Governments and other institutions are assisted by State subsidy to provide treatment for such patients.

Members of the war and defence services are treated at Commonwealth institutions, e.g., the Repatriation Hospital, Concord, the Prince of Wales Hospital, Randwick, and the Lady Davidson Home, Turramurra. State institutions under the control of the Director-General of Public Health are the Waterfall Sanatorium, Randwick Auxiliary Hospital, and an annex to Lidcombe State Hospital and Home. Five sanatoria receive subsidy from the State, and special accommodation for tubercular patients is provided at a number of public hospitals.

Seven chest clinics have been established in the metropolitan area and one at Newcastle for diagnosis and prevention of the disease.

A village settlement for tuberculous patients and their families was established at Picton Lakes in 1925. It has been subsidised by the State since 1933.

An advisory committee on tuberculosis was formed in New South Wales in 1946 to advise the Minister for Health, through the Hospitals Commission, on all aspects of tuberculosis and its prevention.

*Venereal Diseases.*

The treatment of venereal diseases is regulated under the Venereal Diseases Act, 1918, which came into operation on 1st December, 1920. It prescribes that all persons suffering from such diseases must place themselves under treatment by a qualified medical practitioner, and must remain under treatment until cured. Medical practitioners are required to notify all cases to the commissioner appointed under the Act. It is not considered, however, that notification is fully effective. Treatment by unqualified persons is prohibited, and certain drugs used in connection with these diseases may not be sold unless prescribed by a qualified medical practitioner.

There are clinics in operation in the metropolitan district and at Newcastle Hospital, and free treatment is provided at subsidised hospitals in other localities, drugs and instruments being provided by the Government.

The notifications during the year 1946 numbered 5,401, of which 4,828 cases were notified in the metropolitan area and 373 in the Newcastle district. Notifications in 1945 were 4,562, including metropolitan 4,146 and Newcastle 250. In 1946 more than 89 per cent. of the cases were notified by public hospitals and clinics.

Prisoners suffering from venereal diseases are detained for treatment in lock hospitals attached to the gaols. Such prisoners may be detained even after the definite sentence is served, until certified by the medical officer as free from disease.

*TREATMENT OF MENTAL DISEASES.*

The law relating to persons suffering from mental diseases is contained in the Lunacy Act of 1898-1946. Persons certified as insane by two qualified medical practitioners may be admitted to an institution, either at the request of relatives or friends, or upon the order of two Justices of the Peace. Relatives have the right of custody of insane persons if they can give a satisfactory assurance that proper care will be taken of them. Persons found to be insane by proceedings before the Supreme Court in its lunacy jurisdiction may be admitted to mental hospitals upon the order of the Judge. Voluntary patients may be received with the consent of the Inspector-General into mental hospitals and licensed houses, but may not be detained for more than seven days after written notice is given by the patient of his intention or desire to leave.

The estates of persons proved to be incapable, through mental infirmity, of managing their affairs, are placed under the management and care of the Master in Lunacy. Estates of voluntary patients are placed under his care only at the written request of the patient.

*Mental Hospitals.*

The Government maintains eleven institutions for the reception and treatment of insane persons. One of the State institutions was occupied as a military hospital from March, 1942, to February, 1946. Only one private hospital is licensed under the Lunacy Act for the reception of mental patients; female patients only are treated. Another private institution where both men and women were received was closed at the end of March, 1946. Unauthorised persons are not permitted to take charge for profit of a person of unsound mind. All institutions for mental cases, including reception houses, etc., for their temporary accommodation, are subject to



inspection by the Inspector-General of Mental Hospitals. With his consent, harmless patients may be boarded out or released on leave or they may be discharged to relatives or friends who undertake to care for them.

Under an arrangement with the Government of South Australia, patients from Broken Hill are accommodated in hospitals in that State, the cost of their maintenance being paid by the Government of New South Wales.

There are Reception Houses in Sydney, Newcastle and a few other localities where persons showing symptoms of mental diseases are placed under observation and cases of short duration are treated.

Voluntary patients may be admitted to mental hospitals and a psychiatric clinic has been established for those suffering from the milder forms of mental and nervous disorders. Psychiatric clinics have been established also at a number of general hospitals.

The mental patients under cognisance as being of unsound mind on 30th June, 1947, consisted of 5,357 males and 5,345 females in mental hospitals and a licensed house in New South Wales; 3 men and 3 women from this State in South Australian hospitals; and 497 men and 635 women on leave from the institutions. The total number of persons under cognisance, exclusive of voluntary patients, at intervals since 1911 is shown below.

TABLE 738.—Mental Patients, 1911 to 1947.

At 30th June.	Number of Mental Patients.			Proportion per 1,000 of Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
1911*	3,810	2,573	6,383	4.27	3.18	3.75
1921	4,510	3,432	7,942	4.21	3.33	3.78
1931	5,346	4,357	9,703	4.12	3.47	3.80
1936	5,846	5,172	11,018	4.34	3.92	4.13
1939	6,082	5,604	11,686	4.39	4.11	4.25
1940	6,158	5,686	11,844	4.42	4.13	4.27
1941	6,264	5,793	12,057	4.47	4.17	4.32
1942	6,222	5,832	12,054	4.40	4.15	4.28
1943	6,107	5,854	11,961	4.29	4.13	4.21
1944	5,944	5,852	11,796	4.12	4.06	4.09
1945	5,943	5,914	11,857	4.10	4.08	4.09
1946	5,932	5,940	11,872	4.06	4.05	4.06
1947	5,857	5,983	11,840	3.92	4.01	3.97

\* At 31st December.

The particulars in the foregoing table relate to patients certified under the Lunacy Act. Voluntary patients also are admitted to the institutions; the average daily number in the hospitals was about 400 in recent years.

The number of admissions and re-admissions to mental hospitals in the last nine years is shown below:—

TABLE 739.—Mental Hospitals—Admission and Deaths, 1938-39 to 1946-47.

Year ended 30th June..	Admissions.			Re-admissions.			Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1939	729	672	1,401	138	138	276	363	337	700
1940	703	651	1,354	166	149	315	417	330	747
1941	765	653	1,418	108	104	212	363	287	650
1942	752	711	1,463	93	117	210	433	361	794
1943	705	695	1,400	98	124	222	484	305	879
1944	609	699	1,308	104	126	230	462	409	871
1945	624	700	1,324	93	118	211	385	353	738
1946	670	767	1,437	120	138	258	404	433	837
1947	632	780	1,412	102	117	219	407	401	808

During 1946-47 the deaths numbered 808, or 7.6 per cent. of the average number resident, and the discharges included 544 persons, or 5.1 per cent., who had recovered, and 238, or 2.2 per cent., who had been relieved.

The average weekly cost of maintaining patients in Government mental institutions during the year 1946-47 was 38s. 9d. per patient, of which the State paid 32s., and the balance was derived from private contributions. The following table shows the average weekly cost per patient during the years cited:—

TABLE 740.—Patients in State Mental Hospitals—Cost of Maintenance.

Year ended 30th June.	Annual Cost of Maintenance of Patients.	Cost of Maintenance per Patient per week.		
		To State.	Private Contributions.	Total.
	£	s. d.	s. d.	s. d.
1939	781,958	23 2	4 2	27 4
1940	775,346	21 11	4 9	26 8
1941	815,695	23 0	4 11	27 11
1942	810,461	22 9	4 11	27 8
1943	822,384	22 7	5 10	28 5
1944	889,686	25 3	5 11	31 2
1945	935,081	26 8	5 11	32 7
1946	1,006,897	28 2	6 3	34 5
1947	1,110,163	32 0	6 9	38 9

The cost of voluntary patients and inebriates is included. During the year ended June, 1947, salaries amounted to £642,743, the cost of provisions, stores, etc., was £330,388, fuel, light and water £29,155, and miscellaneous items, £107,877. In addition, farm products to the value of £18,539 were grown and consumed at the institutions.

#### DEAF-MUTISM AND BLINDNESS.

The care and education of the deaf and dumb and the blind are undertaken at the New South Wales Institution for the Deaf and Dumb and

the Blind, maintained partly by Government subsidy and partly by public subscriptions, and the Royal Sydney Industrial Blind Institute, which provides industrial training to enable blind persons to earn a livelihood, and conducts homes for them. Institutions for deaf mutes are conducted by Roman Catholic religious societies, at Waratah for girls and at Castle Hill for boys; also a school for blind children at Strathfield.

Under the Commonwealth invalid pension system, provision is made for the payment of pensions to permanently blind persons above the age of 16 years as described in this chapter.

#### FRIENDLY SOCIETIES.

Friendly societies exercise a strong influence for good in the community by inculcating habits of thrift, and preventing and relieving distress.

The benefits assured by the societies consist usually of medical attendance and medicine for a member and his family, with sick pay for the member, and funeral allowances for the member and his wife. The sickness benefit in the largest societies is 21s. per week during the first six months of illness. Then the rate of benefit is reduced at six-monthly intervals, so that it is 15s. for the second period of six months, 5s. or 10s. for the third period, 5s. for the fourth period, and a rate of 2s. 6d. per week is paid during the remainder of illness, that is, after the first two years.

The funeral benefits range usually from £10 to £40 at death of the member, according to the period of membership, and a contingent benefit of £10 or £15 is payable on death of his wife. In several societies members may assure for sums up to £100, and in two of them it is possible to assure for £200, the maximum allowed by law. A separate benefit for widows of members—usually £10—may be assured in most of the societies for a stated contribution.

The rates of contribution for sick pay and funeral donations vary according to the rates of benefit, the average contribution being about 5d. per week for sick pay and 2½d. per week for funeral benefits. The usual contribution for medical benefit is 12s. per quarter in the metropolitan district and 14s. in the country.

The societies may be divided into two classes, viz., friendly societies proper and miscellaneous societies, which are within the scope of friendly societies legislation, though their benefits differ somewhat from those of ordinary friendly societies.

At 30th June, 1947, there were 54 societies, including 22 miscellaneous; 16 possessed branches and 16 were classed as single societies. Membership consisted of 193,879 men, 20,550 women, and 17,416 juveniles, total 231,845. The number of members entitled to benefits was 223,920.

Information regarding receipts and expenditure of Friendly Societies and the accumulated assets is shown in the chapter of this Year Book entitled Private Finance.

#### *Miscellaneous Friendly Societies.*

In addition to the friendly societies proper there were at 30th June, 1947, twenty-two miscellaneous societies registered under the Friendly Societies Act. These organisations are medical institutions or dispensaries.

for the supply of medicine and, in some cases, medical attendance to those members of contributing branches of the ordinary friendly societies whose names have been placed on their lists.

#### *State Subvention to Friendly Societies.*

In terms of an Act passed in 1908 the State commenced to pay an annual subvention to the friendly societies for the purpose of enabling them to pay sickness benefits for extended periods, and to relieve aged members of the necessity of paying contributions.

The amount of subvention which may be claimed in each year under existing arrangements is a sum equal to the amount of contributions for sickness, funeral and medical benefits in respect of men over 65 years of age and women over 60 years as follows:—(a) those who were members at 30th June, 1932, and at the date of application for subvention had been members for a continuous period of 15 years; and (b) widows or widowed mothers of deceased members who were members at 30th June, 1932, and who had been members for 15 years continuously; (c) widows and widowed mothers in respect of whom subvention was being paid at 30th June, 1932. A proportion of each year's subvention in respect of medical benefits is advanced to the societies at quarterly intervals pending determination of the annual claims.

The amount paid to the societies in respect of subvention claims for the year 1943-44 was £93,218; for 1944-45, £97,566; for 1945-46, £101,662; and for 1946-47, £106,309. The total amount paid by the State in respect of claims to 30th June, 1947, was approximately £2,170,400.

#### UNEMPLOYMENT AND SICKNESS BENEFITS.

A scheme of unemployment and sickness benefits is provided by the Commonwealth in terms of the Unemployment and Sickness Benefits Act, 1944; it was brought into operation on 1st July, 1945.

The benefits are for persons, except pensioners, between the ages of 16 and 65 years (or in the case of women 60 years). The residence qualification is 12 months in Australia immediately prior to the date of claim.

For unemployment benefit the claimant must satisfy the authorities that his unemployment is not due to participation in a strike, that he is capable and willing to undertake suitable work and has taken reasonable steps to obtain it.

For sickness benefit the claimant must satisfy the authorities that he is temporarily incapacitated for work by reason of sickness or accident and has thereby suffered loss of wages or other income up to the amount of benefit claimed.

Benefit is payable from and including the seventh day after the claimant becomes unemployed or incapacitated or from the date of application, whichever is the later. A means test is imposed and benefit is reduced by the amount of income in excess of the limit shown below. The value of the claimant's property is disregarded in assessing means and the following items are not included as income, viz., sickness pay from approved friendly society up to £1 per week, payments for dependent

children, maternity allowances, hospital benefits and payments under the Tuberculosis Act. The rates of benefit are as follows:—

Single person—		Income limit per week.	Benefit per week.
		s. d.	s. d.
Age 16 and under 17 years	...	5 0	15 0
17 „ „ 18 „	...	10 0	15 0
18 „ „ 21 „	...	15 0	20 0
Other persons	... ..	20 0	25 0

Additional benefit in the case of a married person is 20s. a week for his spouse and 5s. for one dependent child under 16 years of age (child endowment is payable for dependent children, except one, in the family). A married woman is not entitled to benefit if her husband can maintain her.

Provision is made for granting special benefit to persons not qualified for unemployment or sickness benefit, who by reason of age, disability or domestic circumstances are unable to earn a sufficient livelihood for themselves and their dependants.

There was temporary increase in the rates of benefit during the period 15th August to 14th November, 1945, to meet unemployment arising from the transition from war-time to civil production. The increased rates were 50s. for adults and married men and 30s. for unmarried men at ages 18 to 21 years, for a maximum period of six weeks. Allowances for dependants remained unchanged.

The cost of benefits under this scheme is paid from the National Welfare Fund.

Particulars of claims admitted, beneficiaries and payments in New South Wales (and the Australian Capital Territory) in 1945-46 and 1946-47 are shown below:—

TABLE 741.—Commonwealth Unemployment and Sickness Benefit in New South Wales.\*

Year ended 30th June.	Claims Admitted.			Receiving Benefit at 30th June.			Payments during year.
	Males.	Females.	Total.	Males.	Females.	Total.	
Unemployment Benefits.							£
1946... ..	38,592	10,197	48,789	1,203	95	1,298	275,205
1947... ..	12,297	407	12,704	1,350	50	1,400	172,141
Sickness Benefits.							
1946... ..	11,822	2,435	14,257	2,063	438	2,501	198,943
1947... ..	15,798	3,725	19,523	2,797	825	3,622	258,782
Special Benefits.							
1946... ..	87	61	148	9	39	48	1,068
1947... ..	336	72	408	54	68	122	6,772
Total.							
1946... ..	50,501	12,693	63,194	3,275	572	3,847	475,216
1947... ..	28,431	4,204	32,635	4,201	943	5,144	437,695

\* Including Australian Capital Territory.

## PROTECTION OF ABORIGINALS.

The protection of the aboriginal natives of New South Wales is the function of the Aborigines Welfare Board of which the Under Secretary (*i.e.*, the permanent head) of the Chief Secretary's Department is chairman. Other members include the Superintendent of Aborigines Welfare, an officer of the Department of Education and of the Department of Public Health, an expert in agriculture, an expert in sociology or anthropology, and since 5th July, 1945, two members representing the aboriginal race, one a full blood and the other a full blood or having an admixture of aboriginal blood. Provision for the appointment of two aboriginals as members to represent their race is contained in an amending Act passed in 1948.

The Board exercises general supervision over matters affecting the welfare of the aborigines, manages the reserves set apart in various localities for them and provides for the custody and maintenance of aboriginal children.

The Board may board out with foster parents or in approved charitable institutions children committed to its control, and may place them in suitable employment. There is a training home for girls at Cootamundra, and a home for boys at Kinchela, on the Macleay River. A home for young children is maintained at Bomaderry by the United Aborigines' Mission, with assistance from the State.

In 1946-47, eighteen stations were conducted as aboriginal community settlements under the control of a manager and a matron.

Aborigines are eligible, under certain conditions, for social benefits such as age, invalid or widows' pensions, maternity allowances, child endowment and unemployment and sickness benefits.

State expenditure on the welfare of the aborigines was £68,394 in 1943-44, £68,751 in 1944-45 and £67,216 in 1945-46. These amounts included £16,902 and £15,705 and £15,425 for education in the respective years.

Assistance in the form of food, clothing and medical treatment is supplied to aboriginal families when necessary.

Particulars as to the number of aborigines in New South Wales are shown in the chapter "Population" of this Year Book.

## DISPOSAL OF THE DEAD BY CREMATION.

There are five crematoria in New South Wales—four in the metropolitan district and one in Newcastle; the first was opened in 1925.

A comparative statement regarding the number of cremations is shown by the following table:—

TABLE 742.—Cremations, 1931 to 1947.

Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1931 ...	507	366	873	1943 ...	3,555	2,757	6,312
1936 ...	1,579	1,192	2,771	1944 ...	3,372	2,760	6,132
1939 ...	2,304	1,825	4,129	1945 ...	3,479	2,939	6,418
1940 ...	2,662	1,943	4,605	1946 ...	4,048	3,006	7,054
1941 ...	2,898	2,183	5,081	1947 ...	4,182	3,261	7,443
1942 ...	3,243	2,387	5,630				

The provisions of the law dealing with cremation are contained in the Public Health Act.

#### PENSIONS.

In New South Wales pensions are provided for the aged, the permanently invalided, widows, members of the Forces suffering disability after war service and the dependants of these and of deceased members, and coal and oil shale miners. Provision is made also for superannuation in the Government services and for certain employees of local governing bodies. Several of the banking companies and other firms have made arrangements for the superannuation of employees.

#### *Age and Invalid Pensions.*

Old-age pensions were paid by the Government of New South Wales from August, 1901, and invalid pensions from January, 1908. These were discontinued when the Commonwealth Government commenced to pay pensions, viz., old-age pensions for men and women at age 65 years (or 60 years if permanently incapacitated) on 1st July, 1909, and old-age pensions for women at age 60 years and invalid pensions in December, 1910.

The name "Old-age Pension" was changed to "Age Pension" in terms of the Social Services Consolidation Act, 1947.

In recent years the Commonwealth has introduced additional benefits in the form of (a) allowances for wives and children of invalid and permanently incapacitated or blind pensioners, and (b) funeral benefits.

There has been reciprocity between Australia and New Zealand in respect of age and invalid pensions since September, 1943.

Payment of age and invalid pensions in Australia is subject to a means test. Other qualifications for age pension are age, viz., women 60 years, men 65 years, and continuous residence in Australia for twenty years (disregarding occasional absences up to one-tenth of the total period, absence on war service, etc.). Invalid pensions are payable to persons above the age of 16 years, not receiving age pensions, who have resided continuously for at least five years and have become incapacitated or blind in Australia or during temporary absence from Australia or, if incapacity or blindness occurred before arrival in Australia, they were brought to Australia at age under three years or have resided here for twenty years.

Persons under age 21 years who are adequately maintained by parents are not eligible for invalid pension.

Invalid pensioners or claimants for invalid pension may be required to undergo vocational training or treatment for physical rehabilitation as a condition of grant or continuation of pension. Such persons receive invalid pension during training or treatment.

In computing the value of the property of a claimant or pensioner for the purpose of the means test, his home, furniture and personal effects and certain other classes of property are disregarded. In assessing his income the following are excluded: benefits from friendly societies, sick pay from trade unions, food relief from the State, maternity allowances, child endowment, hospital benefits, payments under the Tuberculosis Act, and gifts and allowances from parents or children. The value of board and lodging

received is computed at a maximum of £32 10s. per annum (12s. 6d. per week) and income is deemed to be reduced by £26 for each child under 16 years of age, less any payment, such as child endowment, received.

Age or invalid pension is not granted to persons with property of net value exceeding £650; prior to August, 1946, the limit was £400. The annual rate of pension is reduced, except in the case of permanently blind persons, by the amount of income in excess of £52 (£32 10s. prior to August, 1946), also by £1 for every complete £10 of property in excess of £50 but not exceeding £400, and by £2 for every £10 in excess of £400. Since September, 1923, a higher income limit has been prescribed in the case of permanently blind persons. From April, 1944, to August, 1946, the rate of such pensions was reducible by the amount of income of the pensioner and spouse, apart from pension, in excess of £260 per annum, and since August, 1946, by the excess over £279 10s. per annum.

The rates of age and invalid pension were varied automatically with retail price index numbers compiled by the Commonwealth Statistician, between October, 1933, and September, 1937, and from December, 1940, to August, 1943. Adjustment by this method was suspended in November, 1943, and subsequent alterations were made by legislation. The maximum rate which had been 27s. a week since August, 1943, was increased in July, 1945, to 32s. 6d. a week and in July, 1947, to 37s. 6d.

Changes, since 1901, in the maximum rate of pensions and prescribed limits of income, i.e., the amount of income which disqualifies for pension (except in the case of blind persons), are shown in the following table:—

TABLE 743.—Age and Invalid Pensions—Rates.

Date.	Maximum Rate of Pension.		Limit of Income (including pension) per annum.
	Per week.	Per annum.	
	s. d.	£ s.	£ s.
1901, August ... ..	10 0	26 0	52 0
1916, October ... ..	12 6	32 10	58 10
1920, January ... ..	15 0	39 0	65 0
1923, September ... ..	17 6	45 10	78 0
1925, October ... ..	20 0	52 0	84 10
1931, July ... ..	17 6	45 10	78 0
1932, October ... ..	15 0	39 0	71 10
	to	to	
	17 6	45 10	
1933, October ... ..	17 6	45 10	78 0
1935, July ... ..	18 0	46 16	79 6
1936, September ... ..	19 0	49 8	81 18
1937, September ... ..	20 0	52 0	84 10
1940, December ... ..	21 0	54 12	87 2
1941, April ... ..	21 6	55 18	88 8
December ... ..	23 6	61 2	93 12
1942, April ... ..	25 0	65 0	97 10
October ... ..	25 6	66 6	98 16
1943, January ... ..	26 0	67 12	100 2
April ... ..	26 6	68 18	101 8
August ... ..	27 0	70 4	102 14
1945, July ... ..	32 6	84 10	117 0
1946, August ... ..	32 6	84 10	136 10
1947, July ... ..	37 6	97 10	149 10



Pensions were paid from 12th October, 1916, to inmates of approved benevolent asylums, who were in receipt of pension before admittance, and from 13th September, 1923, to all eligible inmates. The maximum rate of pension paid to such inmates was 6s. a week in 1937 and it was increased gradually, by half the amount of increases in full pensions, to 9s. 6d. in August, 1943. Subsequently it was increased to 11s. 6d. in July, 1945, and 13s. in July, 1947.

Under certain circumstances, allowances were paid to the benevolent asylums in respect of pensioner inmates. It is prescribed by the Social Services Consolidation Act, 1947, that any balance of an inmate's pension in excess of 13s. a week shall be paid to the institution for his upkeep.

Particulars of pensioners in benevolent asylums and of wives and children's allowances are not included in the following table, but are shown later (see Tables 745 and 746).

TABLE 744.—Age and Invalid Pensions in New South Wales\*—  
1911-12 to 1946-47.

Year ended 30th June.	New Claims.	Pensions current in New South Wales* at 30th June.			Weekly Rate of Pension as at 30th June.		Estimated Annual Liability as at 30th June.	Estimated Annual Liability per head of Population as at 30th June.
		Males.	Females.	Total.	Max.	Average.		
Age Pensions.								
1912	4,763	13,639	16,029	29,668	s. d. 10 0	s. d. 9 7	£ 734,526	s. d. 8 5
1921	5,727	16,033	23,004	39,037	15 0	14 1	1,428,258	13 7
1931	12,814	28,003	37,029	65,032	20 0	19 1	3,225,872	25 2
1932	11,625	30,098	39,769	69,867	17 6	16 6	2,996,266	23 2
1938	11,004	36,801	47,861	84,662	20 0	19 3	4,242,290	31 1
1939	11,611	37,633	49,792	87,425	20 0	19 3	4,375,852	31 9
1940†	11,930	43,325	64,840	108,165†	20 0	19 3	5,417,022	38 11
1941	11,160	43,619	66,411	110,030	21 6	20 9	5,930,704	42 4
1942	11,326	43,235	67,229	110,464	25 0	24 2	6,941,194	49 5
1943	10,351	41,466	66,815	108,281	26 6	25 7	7,190,976	50 4
1944	7,463	38,876	65,538	104,414	27 0	26 0	7,049,172	48 10
1945	8,905	37,748	65,681	103,429	27 0	25 3	6,795,048	46 8
1946	15,386	39,752	68,933	108,685	32 6	31 4	8,865,714	60 4
1947	19,805	42,886	76,350	119,236	32 6	31 4	9,707,386	64 9
Invalid Pensions.								
1912	1,784	2,549	2,278	4,827	10 0	9 9	£ 121,836	1 5
1921	3,278	7,016	8,371	15,387	15 0	14 9	588,588	5 7
1931	6,383	12,148	15,948	28,096	20 0	19 6	1,425,996	11 1
1932	6,025	13,025	16,930	29,955	17 6	17 0	1,326,988	10 3
1938	7,139	17,184	23,384	40,568	20 0	19 5	2,045,082	15 0
1939	7,087	17,630	24,257	41,887	20 0	19 5	2,110,238	15 4
1940†	7,352	11,731	14,875	26,606†	20 0	19 6	1,350,934	9 8
1941	6,874	11,938	15,310	27,248	21 6	21 0	1,491,334	10 8
1942	6,221	12,251	15,967	28,218	25 0	24 6	1,800,370	12 9
1943	4,849	11,382	15,419	26,801	26 6	26 0	1,813,292	12 8
1944	4,845	11,597	14,637	26,234	27 0	26 6	1,805,596	12 6
1945	5,292	13,117	12,858	25,975	27 0	26 5	1,784,796	12 3
1946	6,168	14,446	13,809	28,255	32 6	31 9	2,333,916	15 11
1947	7,341	15,978	14,512	30,490	32 6	31 9	2,515,240	16 9

\* Including Australian Capital Territory.

† 16,638 invalid pensioners qualified for age pensions were transferred to list of age pensioners on 30th June, 1940.

At 30th June, 1947, the number of pensioners in public benevolent asylums in New South Wales was 1,515, and the annual liability for their pensions was £44,989.

Allowances for wives of invalid pensioners and of permanently incapacitated and blind age pensioners, as introduced in July, 1943, were paid at a maximum rate of £39 a year, reducible by the amount of wife's income in excess of £32 10s. 0d. and by £1 for every complete £10 of her property in excess of £50. In July, 1947, the rate was increased to £52 a year to be reduced by reason of any excess of income over £52 or of property over £50 in the same proportion as the rate of pension is reducible. Where pensioners in this group have one or more dependent children under 16 years of age, a child's allowance is paid at the rate of £13 per annum.

Funeral benefit payable in respect of deceased age or invalid pensioners is the cost of the funeral (excluding payment from a contributory funeral benefit fund, except a friendly society fund) or £10 which ever is the less.

The following statement shows the number of wives and children's allowances current at 30th June, 1944, to 1947, and particulars of funeral benefits paid in New South Wales:—

TABLE 745.—Age and Invalid Pensions, Wives and Children's Allowances and Funeral Benefits, N.S.W.\*

Year ended 30th June.	Allowances for Wives and Children at 30th June.			Funeral Benefits.	
	Wives.	Children.	Annual Liability.	Claims Granted.	Amount Paid.
			£		£
1944	3,289	2,057	151,112	4,004	37,828
1945	3,811	2,400	174,356	6,379	60,788
1946	4,174	2,648	189,852	7,362	72,711
1947	4,627	2,933	209,092	8,346	84,062

\* Including Australian Capital Territory.

The amount of funeral benefit is usually the maximum, £10. The number of claims granted in 1946-47 was 8,346, and the aggregate amount of claims actually paid during the year was £84,062.

The total amount of pensions, allowances and funeral benefits paid in Australia under the age and invalid pension scheme was £27,146,898 in 1945-46, and £29,626,022 in 1946-47.

The amount paid in New South Wales and Australian Capital Territory was £11,298,166 in 1945-46, and £12,360,773 in 1946-47. Details regarding pensioners and annual payments since 1938-39 are shown in Table 746.

TABLE 746.—Age and Invalid Pensions in New South Wales\*—Pensioners and Annual Cost, 1938-39 to 1946-47.

Year ended 30th June.	Pensioners at 30th June.				Payments during Year.			
	Age.	Invalid.	Inmates of Benevolent Asylums.	Total.	To Pensioners (inc. wives and children's allowances).	To Institutions for Maintenance of Pensioners.	Funeral Benefits.	Total.
					£	£	£	£
1939.	87,425	41,887	1,308	130,620	6,359,796	55,103	...	6,414,899
1940	108,165†	26,206†	1,282	135,653	6,569,027	58,691	...	6,627,718
1941	110,030	27,248	1,397	138,675	6,989,602	64,430	...	7,054,032
1942	110,464	28,218	1,271	139,953	7,818,746	46,769	...	7,865,515
1943.	108,281	26,801	1,635	136,717	9,182,598	66,996	...	9,249,594
1944	104,414	26,234	1,282	131,930	8,806,395	60,304	37,828	8,904,527
1945	103,429	25,975	1,316	130,720	8,929,796	63,781	60,788	9,054,365
1946	108,685	28,255	1,415	138,355	11,136,851	88,604	72,711	11,298,166
1947	119,236	30,490	1,515	151,241	12,241,410	35,301	84,062	12,360,773

\*Including Australian Capital Territory.

† See note † under Table 744.

The number of pensioners in New South Wales and Australian Capital Territory, as at 30th June, increased from 130,620 in 1939 to a peak 139,953 in 1942; during the next three years the number dropped to pre-war level. A marked increase occurred in 1945-46 as a result of an increase in rate of benefits and retirements from war-time employment.

#### War Pensions.

War pensions are provided by the Commonwealth in terms of the Australian Soldiers' Repatriation Act, 1920-1947. The provisions of the Act relating to pensions were extended in 1940 to the Forces of the current war. In 1943 the rates of pension were substantially increased, conditions regarding eligibility were modified and the scope of benefits was widened.

War pensions are payable to ex-members of the Naval, Military and Air Forces, who are incapacitated, wholly or in part, as the result of service in a theatre of war, and to dependants of war pensioners and members who died on war service. Pensions may be paid under certain circumstances in respect of members of the Forces who served only in Australia.

In cases of disability the rate of pension is determined according to the extent of the disability. Rates of full pension range from £5 to £6 16s. 0d. per fortnight, according to rate of service pay, plus £2 4s. 0d. for the pensioner's wife and 18s. for each child under 16 years of age. Those temporarily, i.e., for at least three months, unable to earn on account of a war service disability may receive a supplementary pension of £2 8s. 0d. if married, or £1 10s. if single. The pension for the totally blind, totally and permanently incapacitated and certain pulmonary tuberculosis cases is £10 2s. 0d. per fortnight, plus an attendant's allowance of £2 8s. 0d. for those deemed to require such service. For disability by amputation or loss of vision of an eye, pension at assessed rate for the extent of incapacity suffered is supplemented by amounts ranging from 9s. 0d. to £4 12s. 0d. per fortnight.

The rate of pension for the widow of a member whose death resulted from war service ranges from £5 10s. 0d. to £7 6s. 0d. per fortnight, according to service rate of pay, and the rates for his children under 16 years of

age are £1 15s. 0d. for the first and £1 5s. 0d. for each other child. The rate for orphaned children is £1 15s. 0d. up to 14 years of age and £2 from that age to 16 years.

Pension is payable to the widowed mother of a member, if she was widowed prior to or within three years after his death, provided that he had not been married and his death is attributed to war service. The rate ranges from £2 10s. 0d. to £6 16s. 0d. a fortnight, according to service rate of pay.

Service pensions (as distinct from war pensions) for the financial assistance of ex-members of the Forces were introduced in January, 1936. These pensions are subject to a means test and are payable whether disability or need arises from war service or not. Ex-members eligible for service pension are men who have served in a theatre of war and women who have served abroad (a) if they are above the age of 60 years, if men, or 55 years if women, or (b) if they are permanently unemployable. Ex-service men and women suffering from pulmonary tuberculosis are eligible, irrespective of age or sphere of service. In the permanently unemployable and tubercular groups pension is payable for wife and for children up to four in number, and pensioners in the tubercular group may receive invalid as well as service pension.

Particulars of war and service pensions in New South Wales are shown below:—

TABLE 747.—War Pensions in New South Wales,\* 1938-39 to 1946-47.

Year ended June.	Pensions Current at 30th June.								Amount Paid during Year.
	Number.				Average Pension per week.				
	Members of Forces.	Dependants.		Total.	Members of Forces.	Dependants.			
		Of Incapacitated Members.	Of Deceased Members.			Of Incapacitated Members.	Of Deceased Members.		
					s. d.	s. d.	s. d.	£	
		War Pensions.							
1939 ...	25,924	46,701	8,691	81,316	20 9	5 4	25 4	2,674,462	
1940 ...	25,671	43,310	8,366	77,347	20 8	5 7	26 0	2,618,564	
1941 ...	25,474	40,236	8,391	74,101	20 8	5 8	26 10	2,560,477	
1942 ...	25,938	38,039	9,169	73,146	20 6	5 10	26 11	2,576,241	
1943 ...	28,518	39,022	10,465	78,005	24 0	7 0	33 3	2,897,870	
1944 ...	32,596	42,515	12,072	87,183	23 2	6 10	33 9	3,661,182	
1945 ...	40,381	51,465	13,174	105,020	21 2	6 2	34 2	4,068,399	
1946 ...	53,744	68,305	16,540	138,589	18 7	5 4	34 3	4,874,706	
1947 ...	59,148	75,756	16,855	151,759	18 8	5 3	34 8	5,663,529	
1947—									
'14 war	22,983	24,338	6,707	54,028	26 3	8 8	39 0	3,123,808	
'39 war	36,165	51,418	10,148	97,731	13 11	3 8	31 9	2,539,721	
		Service Pensions.							
1939 ...	2,333	1,539	...	3,872	16 3	8 8	...	118,443	
1941 ...	2,780	1,645	...	4,425	17 8	10 4	...	162,935	
1943 ...	2,874	1,491	...	4,365	22 2	13 10	...	218,173	
1945 ...	2,814	1,205	...	4,019	22 9	16 2	...	199,535	
1946 ...	3,069	1,134	...	4,203	27 11	18 0	...	253,274	
1947 ...	3,603	1,153	...	4,756	28 11	19 3	...	275,949	

\* Including Australian Capital Territory.

The total amount paid by the Commonwealth in 1946-47 was £15,959,761, viz., war pensions £15,055,641 and service pensions £904,120.

*Pensions for Coal and Oil Shale Mine Workers.*

A pension scheme for coal and oil shale mine workers in New South Wales was commenced in November, 1941, in terms of the Coal and Oil Shale Mine Workers (Pensions) Act, 1941, which was amended in 1942, 1947 and 1948.

The scheme relates to (a) persons employed in coal and shale mines in New South Wales, or so employed at any time since 1st January, 1928; (b) persons permanently incapacitated during such employment prior to the commencement of the Act; (c) persons employed in transporting coal or shale from mine to point of delivery by the owner; (d) elected officials of industrial organisations of coal and oil shale mine workers; and (e) (since June, 1942), managers, colliery engineers and electricians and clerks employed by mine owners in or about a mine.

Subject to certain qualifications as to residence in the State and period of employment, the workers are entitled to pension upon compulsory retirement at age sixty-five years in the case of managers, colliery engineers and clerks, and at age sixty years in other cases. (Compulsory retirement of coal mine workers, as prescribed by the Act, was suspended during the war period.)

Mine workers partially or wholly incapacitated in the course of their employment subsequent to 1st February, 1930, are entitled to benefit under the scheme; also those permanently incapacitated subsequent to 1st January, 1920, if they had been engaged in the industry for at least twenty years; upon the death of a pensioner or mine worker pension is payable to his widow or under certain circumstances, one female dependant. The rate of pension (as increased by 5s. a week from 29th June, 1947) was £2 5s. a week for mine workers, or £1 15s. for widows. In addition, allowances are payable for dependants, viz., £1 10s. a week, for wife or one female dependant over 16 years of age and 8s. 6d. each for children (or in some cases, dependant brothers and sisters). The pension for mine workers and allowances for wives were increased by 7s. 6d. a week, and pension for widows by 5s. a week in April, 1948.

Where mine workers or dependants are entitled to receive invalid, age or widow's pension or child endowment, such amounts, as well as earnings of men under 60 years of age permanently incapacitated for mine work, are deducted from pension and allowances. Benefit is reducible also where compensation is payable in terms of the Workers' Compensation Act or damages are recovered from the employer.

The maximum amount of pension and allowances was £4 5s. 6d. per week until increased to £5 10s. 6d. in April, 1948. If a pensioner or any dependant for whom he may receive allowance engages in employment, his pension, including allowances, is reduced by any excess of average earnings of the pensioner and dependants over £2 10s. a week. But it is provided that where the average weekly earnings of a dependant exceed the allowance payable for him, his average weekly earnings shall be deemed to be the amount of allowance only.

Two funds have been established, viz., the Coal Mine Workers' Pension Fund and the Oil Shale Mine Workers' Pension Fund. They are administered by the Pensions Tribunal, which consists of a chairman and four members, viz., one representative each of owners of coal mines, owners of oil shale mines and of unions of employees in each of the industries. In terms of the amending Act of 1947, the chairman of the Joint Coal Board, constituted under the Coal Industry Act, 1946, is chairman of the Tribunal. At meetings of the Tribunal, only the chairman and the two

members representing the industry concerned are entitled to vote on questions solely connected with either coal or oil shale mining; on questions of a general nature all five members may vote.

Each pension fund consists of contributions by the Government of New South Wales, the mine workers and mine owners concerned. The Pensions Tribunal estimates the amount required by the funds in each year for payment of pensions and other charges and for provision of a reserve as determined by the Governor. The Government contributes one-fourth of the estimated amount or £80,000, whichever is the less, and the balance is paid by the mine workers and owners in proportions fixed by the Act.

The rate of contribution by coal mine workers was 2s. 6d. a week from 23rd November, 1941, and was increased to 8s. 6d., subject to certain concessions during sickness or injury and for apprentices and juniors, from 18th March, 1945. The rate of contribution by oil shale mine workers was 1s. from November, 1941 and 2s. 6d. from July, 1942.

The rate of contribution by coal mine owners from 23rd November, 1941 to 30th June, 1945, was 5d. per ton on current production of coal. The rate contributed by shale mine owners from 21st November, 1941 to 30th June, 1942, was 4½d. per ton of oil shale produced in the year 1940; and from 1st July, 1942, it was 5d. per ton of current production. In 1945 the basis of the mine owners' contributions was changed and from 1st July, 1945, the owner of each coal or oil shale mine was required to contribute twice the amount contributed by the workers of the mine. The contribution by owners was increased to two and a half times the mine workers' contribution as from 1st July, 1947, and to three and a half times as from 2nd May, 1948.

TABLE 748.—Coal and Oil Shale Mine Workers' Pension Funds—Income and Expenditure.

Particulars.	Year ended 30th June.					
	1942.*	1943.	1944.	1945.	1946.	1947.
	£	£	£	£	£	£
<b>INCOME.</b>						
Contributions—						
State Treasury ... ..	56,250	80,000	80,000	80,000	80,000	80,000
Mine Owners ... ..	150,932	249,137	236,371	258,934	287,105	295,173
Mine Workers ... ..	66,838	114,119	109,331	122,682	144,345	149,232
Interest ... ..	27	1,445	2,469	1,821	2,282	5,304
<b>Total ... ..</b>	<b>274,047</b>	<b>444,701</b>	<b>428,171</b>	<b>463,437</b>	<b>513,732</b>	<b>529,709</b>
<b>EXPENDITURE.</b>						
Pensions ... ..	148,180	390,749	428,287	474,592	397,233	394,376
Administration ... ..	3,329	9,750	9,037	8,865	8,098	8,963
Provision for Bad Debts ... ..	2,500	2	...	...	2,500	2,500
<b>Total Pensions and Administration ... ..</b>	<b>154,009</b>	<b>400,501</b>	<b>437,324</b>	<b>483,457</b>	<b>407,831</b>	<b>405,839</b>
<b>Provision for Reserve ... ..</b>	<b>48,500</b>	<b>72,500</b>	<b>17,500</b>	<b>62,500</b>	<b>78,000</b>	<b>77,500</b>
<b>Total ... ..</b>	<b>202,509</b>	<b>473,001</b>	<b>454,824</b>	<b>545,957</b>	<b>485,831</b>	<b>483,339</b>

\* 31st October, 1941 to 30th June, 1942.

Assets of the combined pension funds at 30th June, 1947 amounted to £367,871, viz., Investments—Government securities £284,750 and fixed deposits at Treasury £5,750, cash £34,036, equipment £648, and sundry debtors £42,687. Liabilities consisted of sundry creditors £3,035; special reserves amounted to £356,500 and balance of revenue account was £8,336.

#### *State Government Service Pensions.*

The pension funds for employees of the State Government of New South Wales are the State Superannuation Fund, the Police Superannuation and Reward Fund and the Government Railways Superannuation Fund. There is also a fund for the superannuation of employees of the Commonwealth Government. These funds are maintained partly by deductions from officers' salaries and partly by grants from the public revenue.

The State Superannuation Fund for employees of the Government of New South Wales and certain governmental bodies was based originally upon the principle of a fund formed by regular compulsory contributions, in equal proportions by the State Government and statutory bodies, as employers, and the officers of the services, so that the moneys accumulated during service would be available to pay the pensions on maturity. Concessions were allowed to officers who were over 30 years of age when the scheme was brought into operation, and the State Treasury made an agreement with the Superannuation Board that the cost of these concessions would be paid from Consolidated Revenue in instalments spread over a number of years.

The scheme was amended as from 1st July, 1929, to provide that contributions to the Superannuation Fund by the Government and two of the corporate bodies, viz., the Sydney Harbour Trust and the Water Conservation and Irrigation Commission, would be made in the form of pension subsidy as the pensions became due and not as regular contributions during the service of the employee concerned. It was subsequently prescribed that the contributions already paid by the Crown in respect of unmatured pensions would be repaid to the Treasury by the Superannuation Fund. The amount, £3,832,000 with interest, was to be repaid in instalments over fifteen years from 1st July, 1933. By an amending Act passed in 1944 the period for repayment of the balance outstanding at 30th June, 1943, was extended to 1953, and the original principle of regular contributions by the Crown was restored in respect of additional units of pension of existing contributors and all units by new contributors as from 1st July, 1944. It is prescribed also that the State Treasurer is to pay the sum of £3,832,000 to the Superannuation Fund in instalments of at least £80,000 per annum, but the amounts so paid (with interest earned thereon) may be used, under agreement with the Superannuation Board, to reduce the Government's liability in respect of pension subsidy under the Act of 1930.

The alteration in the method of payment by employers as from 1st July, 1929, did not apply to contributions by the statutory bodies, except two mentioned above. Therefore the Rural Bank, the Metropolitan and Hunter

District Water, Sewerage and Drainage Boards, the Fire Commissioners, and the Commonwealth Savings Bank (in respect of former employees of the Government Savings Bank of New South Wales) continued to contribute as under the original Act.

The amount of pension (until increased) ranged, according to salary, from two units (£52) to twelve units (£312) per annum. By an amending Act passed in 1948 the value of the pension unit was raised from £26 to £32 10s. Thus provision was made for an increase of 25 per cent. as from 1st April, 1948 in current and future pensions (except orphan benefit), without additional cost per unit to the employee. By the same Act the pension scale was extended from a maximum of twelve units to twenty-six units, as from 1st July, 1948.

Upon the death of a man who was a contributor or pensioner, one-half of the amount of his pension is paid to his widow and orphan pension is paid at £26 per annum for each child up to 16 years of age. The rate for current and future pension for orphans, formerly £13 per annum, was increased to £26 in April, 1944, and the cost of the increase is paid by the employer. In the case of women contributors, pension is payable in respect of the contributor only.

Refunds are made to personal representatives in respect of contributions paid by women and unmarried men who die before retirement. Similar refunds are made also to widowers, subject to deduction of the value of orphan benefit for his children.

Contribution by employees is compulsory, though since April, 1944, a satisfactory medical report has been a condition of acceptance of new contributors to the Fund. Unless the employee's service is terminated sooner, pension is payable and contributions cease at age 60 years or at age 55 years in the case of women who have contributed for retirement at this age.

New scales of contributions were introduced for additional units of pension for existing contributors, as well as all units for new contributors, as from 1st July, 1944. Changes in the scales are illustrated below:—

TABLE 749.—State Superannuation Fund—Contributions by Employees—  
Four-weekly.

Age next Birthday.	Men.				Women.							
	First £52† p.a. to man, £26† p.a. to widow, £13 p.a. for each child under 16 years.*				Each £52† on retirement at—							
	Subsequent increments £52† p.a. to man, £26† p.a. to widow.				Age 55.				Age 60.			
	1919.	1944.	1919.	1944.	1919.	1944.	1919.	1944.	1919.	1944.	1919.	1944.
Years.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
16	0 5 0	0 5 2	0 4 4	0 4 10	0 4 0	0 5 8	0 2 4	0 4 2	0 2 4	0 4 2	0 4 2	0 4 2
19	0 6 0	0 6 2	0 5 4	0 5 8	0 4 10	0 6 10	0 3 0	0 5 0	0 3 0	0 5 0	0 5 0	0 5 0
24	0 8 4	0 7 10	0 7 4	0 7 4	0 7 4	0 9 6	0 4 4	0 6 10	0 4 4	0 6 10	0 4 4	0 6 10
29	0 11 0	0 10 0	0 9 10	0 9 6	0 11 0	0 12 10	0 6 4	0 9 0	0 6 4	0 9 0	0 6 4	0 9 0
34	0 14 2	0 13 2	0 12 10	0 12 4	0 16 2	0 17 8	0 9 0	0 11 10	0 9 0	0 11 10	0 9 0	0 11 10
39	0 18 8	0 17 2	0 17 2	0 16 4	1 4 4	1 5 4	0 12 10	0 16 0	0 12 10	0 16 0	0 12 10	0 16 0
44	1 5 10	1 4 0	1 4 4	1 3 2	2 0 0	2 0 2	0 19 2	1 3 0	0 19 2	1 3 0	0 19 2	1 3 0
49	1 19 10	1 17 0	1 18 2	1 16 0	4 2 4	3 19 8	1 11 6	1 16 2	1 11 6	1 16 2	1 11 6	1 16 2
54	3 16 4	3 12 0	3 14 4	3 10 8	27 7 0	25 14 0	3 4 4	3 11 2	3 4 4	3 11 2	3 4 4	3 11 2
59	22 5 10	22 16 2	21 17 10	22 10 2	.....	.....	20 6 10	22 14 8	20 6 10	22 14 8	20 6 10	22 14 8

\* Orphan benefit (current and future) was increased to £26 p.a. in April, 1944, without cost to employee contributor. † £65 per annum as from 1st April, 1948. ‡ £32 10s. as from 1st April, 1948.



Pensions for the police are paid from the Police Superannuation and Reward Fund to which the police contribute at the rate of 4 per cent. of salary while in the service and 3 per cent. of pension when superannuated. Penalties imposed on members of the police force, penalties and damages awarded to the police as prosecutors and the proceeds of the sale of unclaimed goods are paid to the fund. Contribution by employers is paid from the Road Transport and Traffic Fund in respect of police engaged in traffic duties and the balance required to meet claims is appropriated annually from the Consolidated Revenue Fund.

Police pensions are graduated according to length of service and the rate of salary at date of retirement. The pension for men who entered the police service after 1906 and have served for 20 years or longer is one-fortieth of salary at retirement for every year of service up to a maximum of three-quarters of such salary. Normal retiring age is 60 years, but members may be retained in the force until age 65 years. Gratuities may be paid to or on behalf of dependants of police who die while in the service.

The Government Railways Superannuation Fund was established in October, 1910, for employees in the State railway and tramway services. Employees contribute at the rate of  $1\frac{1}{2}$  per cent. of wages or salary, and the railway and tramway funds provide all that is necessary beyond such contributions. The amount of pension payable is one-sixtieth of the average annual salary during term of service, multiplied by the number of years of service; the maximum pension is two-thirds of the average salary.

Particulars of contributors and current pensions of the State Superannuation Fund and the Police and Railways Superannuation Funds at 30th June, 1944 to 1947 are summarized below:—

TABLE 750.—Government Service Pension Funds—Contributors and Pensions, 30th June, 1944 to 1947.

At 30th June.	Contribu- tors.	Pensions Current.					
		Officers.		Widows.	Children.	Total.	
		Men.	Women.			Number.	Amount per annum.
STATE SUPERANNUATION FUND.							
							£
1944	24,221	2,746	1,221	2,432	328	6,727	606,289
1945	23,970	2,845	1,205	2,557	359	7,056	646,437
1946	22,812	2,941	1,351	2,657	384	7,333	680,665
1947	22,902	3,053	1,417	2,692	385	7,547	714,632
POLICE SUPERANNUATION AND REWARD FUND.							
1944	3,483	889	.....	84	2	975	*
1945	3,382	933	.....	80	2	1,015	*
1946	3,747	948	.....	83	2	1,033	*
1947	3,869	1,020	.....	88	4	1,121	*
GOVERNMENT RAILWAYS SUPERANNUATION FUND.							
1944	53,170	7,418	.....	.....	.....	7,418	786,463
1945	53,371	8,424	.....	.....	.....	8,424	941,116
1946	52,820	9,536	.....	.....	.....	9,536	1,119,275
1947	53,754	10,448	.....	.....	.....	10,448	1,271,242

\* Not available.

Contributors to the State Superannuation Fund as at 30th June, 1947, numbered 22,902, consisting of 16,842 men and 3,205 women contributing

for retirement at age 60 years and 2,855 women contributing for retirement at age 55 years. The contributory pensions in force numbered 7,154, including those in abeyance because the officers concerned had not yet retired though they had attained maturity age.

Non-contributory pensions also are payable in respect of officers who were over the age of 60 years when the Superannuation Act was brought into operation. The number current at 30th June, 1947, was 393; the beneficiaries were 80 retired officers, 312 widows and 1 child. Of these pensions, 300 amounting to £15,619 per annum were payable from Consolidated Revenue Fund and 93 for £5,477 per annum from funds of corporate bodies.

In addition to the pensions of which particulars are shown above, public service pensions were payable under the Civil Service Act, 1884, to 167 retired officers and to widows of 18 deceased officers at 30th June, 1947. The annual amount of these pensions was £53,630; including £1,306 payable by the Government of New South Wales and £7,196 by the Commonwealth to 34 retired officers who had been transferred from State to Commonwealth Service.

Special provision is made by the Government of New South Wales for pensions to judges and certain officers; the amount paid from Consolidated Revenue Fund was £16,675 in 1946-47.

Accumulated funds of the State Superannuation Fund amounted to £17,355,815 at 30th June, 1947, and the liability in respect of employers' contributions which are being repaid to the State Treasury was £574,966. Investments amounted to £17,478,129; including Commonwealth Government securities £6,832,894, securities guaranteed by the Government of New South Wales, other than loans to county councils) £4,495,525, securities of local governing bodies (including county councils) £6,108,827 and loans to co-operative building societies £40,883.

Particulars of the receipts and expenditure of the superannuation funds in the years ended 30th June, 1944 to 1947, are shown in the following statement;—

TABLE 751.—Government Service Superannuation Funds—Receipts and Expenditure, 1943-44 to 1946-47.

Year ended June.	Receipts.					Expenditure.			
	Contributions.		Interest.	Other.	Total Receipts.	Pensions.	Gratu- ties and Refunds.	Other.	Total Expen- diture.
	Em- ployees.	Em- ployers.							
	£	£	£	£	£	£	£	£	£
STATE SUPERANNUATION FUND.									
1944	502,807	540,841	613,946	61	1,657,655	554,019	51,904	62,726	668,649
1945	516,254	574,498	628,584	96,741	1,816,077	596,488	66,271	54,362	717,121
1946	528,215	626,592	642,978	4	1,797,789	639,950	225,469	46,121	911,540
1947	609,507	753,961	658,767	1,807	2,024,042	678,417	146,522	40,407	865,346
POLICE SUPERANNUATION AND REWARD FUND.									
1944	53,277	221,000	.....	70,546	344,823	339,974	10,190	647	350,811
1945	51,660	236,000	.....	75,826	363,486	348,502	14,118	854	363,474
1946	53,714	282,215	.....	52,708	388,637	359,401	17,474	1,102	377,977
1947	62,852	220,742	.....	50,535	343,129	370,342	13,467	1,342	385,151
GOVERNMENT RAILWAYS SUPERANNUATION FUND.									
1944	280,700	537,164	.....	9,071	826,935	753,366	69,165	4,016	826,547
1945	279,992	650,776	.....	9,519	940,287	857,949	79,654	2,765	940,368
1946	282,652	776,136	.....	10,340	1,069,128	1,009,521	106,650	2,700	1,118,871
1947	312,889	1,036,566	.....	8,548	1,358,003	1,238,085	121,579	3,093	1,367,757

The expenditure of the State Superannuation Fund does not include the non-contributory pensions, which are paid from Consolidated Revenue Fund or funds of corporate bodies. Administrative expenses (included above with "other" expenditure) amounted to £15,359 in 1946-47, as compared with £13,121 in 1943-44 and £13,740 in 1945-46. Refunds of contributions rose from £66,271 in 1944-45 to £225,469 in the following year. The increase was due in part to the transfer of employees in the Department of Taxation and State employment exchanges from State to Commonwealth service and partly to an increase in resignations, etc., after the war.

Employer contributions of the Police Superannuation and Reward Fund included payments from the Road Transport and Traffic Fund, viz., £29,615 in 1943-44 and 1945-46, £29,625 in 1944-45 and £37,242 in 1946-47; the balance in each year was paid from Consolidated Revenue.

The total subsidy paid from public revenues to the Railways Superannuation Fund up to 30th June, 1947, was £8,591,201, of which £402,650 had been provided from Consolidated Revenue, £6,335,689 from the Government Railways Fund and £1,852,862 from the Road Transport and Tramways Funds. Since the inception of the fund, 19,386 superannuation allowances have been approved, 8,574 retired officers have died, 330 have been re-employed and 34 allowances have been written off.

#### *Commonwealth Superannuation Fund.*

The Superannuation Fund for employees of the Commonwealth was commenced in November, 1922. Contributions by employees are deducted from their salaries during service and contributions by the Commonwealth as employer are paid when the officers retire on pension. Each employee contributes for a number of units, according to his salary at a rate appropriate to his age when he commenced to contribute for the units. Concessions as to the number of units to be taken and the rate of contribution have been provided in respect of officers aged 30 years or over at the commencement of the scheme. In terms of an amending Act passed in 1945, married women are not eligible to become contributors and women contributors who marry are deemed to have resigned.

Since September, 1937, employees have not been admitted as new contributors unless a medical practitioner has certified that they were of sound health and free from physical defects.

Employees may contribute for retirement at age 60 or 65 years. Pension is payable when the contributor retires on or after attaining retiring age or, in cases of invalidity or incapacity, at an earlier age. Benefit for the widow of a contributor or pensioner is half the pension to which her husband was entitled. Orphan benefit in respect of children under 16 years of age is £13 per annum or where the children lose both parents £26.

In the event of retrenchment after more than ten years' service a contributor is entitled to benefit in the form of lump sum or pension which is the actuarial equivalent of contributors paid by him and an appropriate amount to represent employer contributions. Where service is terminated by resignation, discharge or dismissal, the contributor receives a refund of the contributions paid by him.

Prior to amendment in 1947, as described below, the amount of pension, in units of £26, ranged from £52 (two units) to £416 (16 units) according to salary.

In 1937 a Provident Account was created as part of the Superannuation Fund for the benefit of employees ineligible to contribute to the fund owing to physical disability or failure to pass the prescribed medical examination. Certain employees may elect to contribute to either Superannuation Fund or Provident Account, viz., those whose contribution for the first two units of pension would be at a rate exceeding the rate prescribed for age 45 years and would exceed the rate of contribution to the fund which is equivalent to 5 per cent. of salary.

Benefit from the Provident Account on retirement or on retrenchment after service of ten years or more is a sum equal to twice the amount contributed, with compound interest thereon at the rate of 3 per cent. per annum, but not less than an amount equal to six months' salary. On the death before retirement of a male contributor to the account, benefit is paid to his widow or if he is not survived by a widow, his children under 16 years of age. Upon resignation, dismissal or discharge, a contributor receives an amount equal to his contributions with compound interest at 3 per cent. Similar benefit is payable to personal representatives upon the death of a contributor without dependants.

In June, 1947, the Superannuation Act was amended. The value of the pension unit was raised from £26 to £32 10s., without increase in the scale of contributions by employees. Existing pensions were increased by 25 per cent. Certain addition to pension on actual retirement is prescribed in respect of employees who have contributed for retirement at age 60 years, but continue in the service of the Commonwealth after that age. Payments from the Provident Account, as from June, 1947, were increased by 25 per cent. and, subject to certain conditions, a retrospective adjustment was made in the case of contributors to the account who had already retired. The pension scale was extended from 16 to 26 units (£845) and provision was made for payment of Commonwealth subsidy to the fund if the average interest yield on its investments falls below 3½ per cent. in any year.

At 30th June, 1946, contributors to the Commonwealth Superannuation Fund numbered 46,213 and contributors to the Provident Account 4,073; the number of pensions in force was 9,909. In the year 1945-46 contributions amounted to £914,971 and interest to £510,951; the amount of pensions paid was £944,181, viz., £265,980 from the Superannuation Fund and £678,201 from Consolidated Revenue Fund; refunds of contributions were £201,336. Contributions to the Provident Account amounted to £68,402 and benefits paid, £32,623, included £17,780 paid from the Consolidated Revenue Fund.

#### *Superannuation—Local Government Services.*

A superannuation scheme for permanent employees of municipalities and shires was brought into operation in April, 1928, in terms of the Local Government (Superannuation) Act, 1927. It provides for compulsory endowment insurance with approved societies. The policies mature at age 65 or previous death and the premiums are payable by the councils and the employees at prescribed rates. There is also a provident fund formed by contributions by councils and employees for those who are debarred from insurance on account of age or other circumstances. The scale of compulsory cover ranges from £200 to £1,000 according to age and salary.

The insurance cover intact at 31st March, 1946, in respect of 6,356 employees was £4,149,791 (including bonuses £384,691) or £653 per employee; and 1,929 employees were contributors to the Provident Fund, which amounted to £161,777 at 31st March, 1946.

#### BUILDINGS.

Brick buildings predominate in Sydney and suburbs, and local sandstone and concrete are used to a great extent in the construction of the larger buildings. Suburban dwellings have been built, for the most part, on the cottage plan though many blocks of flats have been erected, especially in seaside suburbs. The maximum height of buildings in the metropolitan district is limited by law to 150 feet, except in the case of those erected for the purposes of public worship. Outside the city proper, permission must be obtained from the Chief Secretary for the erection of buildings over 100 feet high. The skyline must be approved by him and adequate provision must be made for protection against fire.

Extensive powers for supervising and regulating the construction of buildings and for promoting town and country planning have been conferred upon the councils of municipalities and shires.

Proposed schemes for town planning must be submitted to the Minister for Local Government and referred by him to the Town and Country Planning Advisory Committee. When the Committee has reported upon a plan the Minister may decide to proceed with it—with or without alteration—or not to proceed with it or he may refer it back to the councils for further consideration.

The Cumberland County Council, representative of the councils in the county, including the Municipal Council of Sydney, was constituted in 1945 to prepare a master plan for this area. The plan was completed and referred to the Minister for Local Government in July, 1948.

The practice of architecture in New South Wales is regulated by a Board of Architects. Persons using the name "architect" are required to be registered, registration being granted to persons over 21 years of age who possess the requisite qualifications. The Act does not apply to naval architects. There were 827 architects on the register at 31st December, 1946.

#### *Wartime Regulation of Building Activities.*

During the war period the Commonwealth Government exercised a measure of control over building activities. Under National Security Regulations, operative from 5th December, it was prescribed that the consent of the Commonwealth Treasurer must be obtained before application was made to a local council for a permit for a new building or alteration to an existing building. Exemption from the rule was allowed where the estimated cost of the project did not exceed £5,000, and restrictive control over building was extended by reducing the exemption limit. In June, 1942, it was prescribed that the consent of the Commonwealth Minister for War Organisation of Industry must be obtained for all building projects estimated to cost more than £25, except buildings by Government or certain structures for use exclusively for purposes of air raid precautions. From 12th September, 1941, Ministerial consent was required for the erection of dwellings for use by more than two households.

The steps by which the exemption limit in respect of various classes of buildings was reduced between 1940 and 1942 are illustrated below:—

TABLE 752.—Building—Wartime Restrictions.

Date of Regulation.	Ministerial consent was required for buildings estimated to cost more than—					
	Dwellings.		Hotels.		Other Buildings.	
	New.	Alterations.	New.	Alterations.	New.	Alterations.
	£		£		£	
1940, Dec. ...	5,000		5,000		5,000	
1941, February ...	5,000		1,000		5,000	
April ...	3,000		1,000		3,000	
June ...	1£	£	£	£	£	£
1942, January ...	3,000	250	1,000	500	3,000	1,000*
June† ...	2,000	250	1,000	500	3,000	1,000*
June† ...	25	25	25	25	25	25

\* Alterations to buildings containing shop premises, £500.

† Amended June, 1944, see next paragraph.

By amending regulations gazetted on 1st June, 1944, restriction was extended to embrace all building operations including erection, alteration, addition, demolition, repair, etc., and work for the provision of heating and lighting services, sewerage and drainage. Ministerial permit was required for any building operation unless the total cost did not exceed a prescribed limit, *e.g.*, £25 in a financial year on painting or papering a residential building (except hotel or farm house) and a similar sum annually on other building operations on residences; £100 a year on business, educational or religious building; £100 on building work by or out of moneys provided by the War Damage Commission. For other buildings the annual limit was £25 in respect of each structure but not more than £100 by any one owner. Government building was exempt, also fencing or drainage or irrigation work for agricultural purposes or the supply of water for mining.

From July, 1944, the subdivision of the larger houses was allowed without permit with a view to relieve the existing shortage of homes. In August, 1945, restriction was further relaxed so that permits were no longer required for the erection of single unit dwelling houses at cost not exceeding £1,200 nor for repairs, renovations, etc., not exceeding £150.

#### *Post-war Control of Building Operations.*

As from 1st November, 1945, control of building operations passed from the Commonwealth to the States. In New South Wales statutory provision for State control was made by the Building Operations and Building Materials Act, 1945 (No. 12 of 1946), which commenced on 4th February, 1946.

Permits must be obtained from the building control authority for building operations except the following: Erection of timber-framed houses not exceeding 1,200 sq. feet and brick or concrete houses not exceeding 1,250 sq. feet; farm houses; buildings for purposes of primary (rural,

(forestry and fisheries) production costing not more than £500; sewerage and drainage connections ordered by local governing authority. Permits from the building control authority for the erection of dwelling houses were required only in counties of Cumberland and Northumberland and the Wollongong-Kembla and Blue Mountains districts until 20th June, 1947, when the control was extended to embrace the whole State except the county of Maccowinna and certain other counties in far north-western sector. Permit is not required for repairs, alterations or additions to dwellings or business premises unless the cost exceeds a certain amount.

The use of the principal materials for building, heating and cooking appliances, hardware, etc., are subject to control under the Building Operations and Building Materials Act, 1945. By arrangement with the States the Commonwealth allocates between the States certain building materials which are required, but not produced, in all the States; the distribution of such materials within the boundaries of a State is regulated by the State concerned.

#### STATISTICS OF BUILDING OPERATIONS.

The statistics in this section of the Year Book relate to buildings as distinct from works which are not buildings. Therefore they are exclusive of earthworks, railways, roads, water storages, silos, rural fencing, retaining walls, etc. Information regarding building on rural holdings is not included, but data are being collected for 1947-48. Repairs, renovations and minor alterations to buildings are not included owing to the difficulty of obtaining records thereof.

Prior to July, 1945, statistics of building operations in New South Wales were derived mainly from "permits to build" issued by the Municipal Council of Sydney and the councils of the local areas to which was applied Part XI (Building Regulation) of the Local Government Act, 1919, viz., the metropolitan municipalities, 129 country towns and seven extra metropolitan shires. Returns were supplied by the councils to show the number, value (estimated cost) and type of new buildings and particulars of alterations and additions to existing buildings as approved by the councils on applications submitted by builders. The councils do not issue permits for Government building projects, and particulars of these are not included in the councils' returns of permits and were not compiled until July, 1939.

In view of the need for complete data of actual new building in the post war period, the scope of the statistical collection was extended when arrangements were made to collect a quarterly return of new building from individual builders, commencing with September quarter, 1945. In the following year additional data were obtained also from councils to show the actual number of new houses built (as distinct from "permits to build") in most Local Government areas in New South Wales, and from January, 1947, a monthly or quarterly return of permits for new buildings and actual number of new houses built in all Local Government areas of the State.

Statistics of building operations are reviewed in the following pages in three sections: (1) particulars of buildings authorised, commenced and completed—available since September quarter, 1945; (2) particulars of private permits and government building—available (for Government building) since July, 1939; and (3) particulars of private building permits in the years 1937 to 1947.

*Building Operations—New South Wales, July, 1945, to December, 1947.*

In the collection of returns from builders considerable difficulty is experienced in maintaining a current list of all builders operating in the State, and in tracing operations of the many "owner builders," i.e., those who build their own homes without letting the contract to a builder. Consequently most of the figures for the second half of 1945 and the first half of 1946, as shown in tables 753 to 755, are (in part) estimates. During 1947 the co-operation of Local Government bodies and builders made it possible to produce figures with greater precision.

The term *value* as applied to building operations represents the estimated cost of the buildings, when complete, excluding the value of the land on which new buildings are erected.

The *value of buildings authorised*, as shown in Table 753 to 755, relates to (a) houses and flats (including additions) for which permits were issued by local authorities, plus those commenced or contracts let by government bodies; and (b) other private buildings (including additions) for which permits were issued by building control authorities or contracts were let or day labour building was undertaken by government bodies (including conversions of military huts to temporary dwellings).

In the two and a half years following the cessation of hostilities with Germany, that is, from July, 1945, to December, 1947, the total value of buildings authorised to be built in New South Wales (all local areas) was approximately £110,000,000. It is estimated that the value of buildings actually commenced was in the vicinity of £73,000,000, and of buildings actually completed £43,000,000.

TABLE 753.—Building Operations—New South Wales—Summary—July, 1945, to December, 1947. (Government building is included.)

Period.	Value of New Building, including Additions.		
	Authorised.	Commenced.	Completed.
	£	£	£
1945, July to Dec.* ...	12,400,000	Not available	4,500,000
1946, year* ...	46,300,000	28,700,000	15,600,000
1947, year ...	51,300,000	38,200,000	22,800,000

\* Partly estimated.

*Building Authorised, New South Wales.*

*July, 1945, to December, 1947.*

Particulars regarding the value (estimated cost) of new buildings authorised, in each quarter from September, 1945, to be built in New South Wales are shown in Table 754. Government buildings are included and the details are classified according to types of building.



TABLE 754.—New Buildings (including additions) Authorised,\* New South Wales—Estimated Cost.

Period.	Houses and Flats.*		Other Buildings.*					Total.
	Houses (inc. owner-built).	Flats.	Hotels, Guest Houses, etc.	Shops with Dwellings.	Shops only.	Factories.	Other Buildings.	
	£000	£000	£000	£000	£000	£000	£000	£000
1945—September quarter	3,619	13	11	7	32	418	1,153	5,253
December quarter	5,994	35	11	11	23	580	477	7,131
1946—March quarter ...	6,384	107	12	16	32	1,033	545	8,129
June quarter ...	7,842	136	75	82	115	2,450	676	11,385
September quarter	8,832	319	174	135	341	3,606	1,617	15,024
December quarter	7,615	333	98	120	394	2,122	1,118	11,800
Year 1946 ...	30,673	895	359	353	882	9,220	3,956	46,338
1947—March quarter ...	8,326	331	39	93	185	2,037	1,789	12,800
June quarter ...	9,391	481	162	124	131	1,847	976	13,112
September quarter	10,031	464	6	126	17	1,347	1,102	13,093
December quarter	9,292	396	53	279	49	1,572	693	12,334
Year 1947 ...	37,040	1,872	260	622	382	6,803	4,560	51,339

\* See definitions on page 866.

Houses and flats for which (private) permits were issued by local councils and those for which Government contracts were let or work was commenced or authorised represented in value £31,568,000 or 68 per cent. of the total value (£46,338,000) in 1946 and £38,712,000 or 75 per cent. of the total (£51,339,000) in 1947. The value of other buildings for which permits were issued by building control authorities or Government contracts were let or day-labour building was undertaken by Government bodies was £14,770,000 or 32 per cent. of the total in 1946 and £12,627,000 or 25 per cent. in 1947; these include factories £9,220,000 or 20 per cent. in the earlier year and £6,803,000 or 13 per cent. in 1947.

Further details regarding the type of buildings—private and Government—authorised in the years 1946 and 1947 are shown in Table 755. The buildings classified as Government relate to houses and flats and other buildings built by or on behalf of the Housing Commission or other Government bodies, but not those for which loans, etc., were provided by governmental authorities to assist building for private ownership.

The value of private permits for houses and flats issued by local councils in New South Wales increased from £27,463,300 in 1946 to £34,500,000 in 1947 and the value of houses and flats commenced or contracts let by Government bodies increased from £4,104,500 to £4,212,300. In addition, the value of conversions (by Government) of military huts to temporary dwellings was £220,300 and £405,900 in the respective years.

The value of private projects (other than houses and flats) which were authorised by the building control authorities declined from £12,429,800

in 1946 to £9,517,400 in 1947, and the value of Government projects (including conversions of military huts to temporary dwellings) increased from £2,340,100 to £3,109,700. The largest item of the private buildings in this group, viz., factories, declined from £8,853,000 to £6,335,700 or by £2,517,300; there was an increase of £100,200 in Government factories. The largest item of Government building—apart from dwellings—was hospitals, etc., which increased from £701,100 to £1,075,400, and there was an increase from £255,600 to £316,300 in private permits for hospitals.

The value of shops (mainly private) declined from £1,234,900 to £1,003,600; shops with dwellings attached represented, in value, 62 per cent. of the shops authorised in 1947, as compared with less than 29 per cent. in the earlier year.

There was a net decline of £164,100 in the value of schools authorised—a decline from £378,200 to £176,500 in private schools and an increase from £318,000 to £355,600 in Government schools.

TABLE 755.—Classification of New Buildings (including additions)  
Authorised\*—N.S.W.—Estimated Cost.

Type of Building:	1946.			1947.		
	Private.	Government.	Total.	Private.	Government.	Total.
	£	£	£	£	£	£
Houses and Flats—						
Houses—Brick ...	9,851,520	1,469,634	11,321,154	13,929,815	1,633,285	15,563,100
Wood and Fibro ...	15,270,467	2,522,280	17,792,747	16,990,480	2,280,582	19,271,062
Other ...	1,507,923	50,717	1,558,640	2,118,660	86,820	2,205,480
Total Houses ...	26,629,910	4,042,631	30,672,541	33,038,955	4,000,687	37,039,642
Flats ...	833,417	61,833	895,250	1,460,954	211,648	1,672,602
Other Buildings—						
Military huts converted ...	.....	220,319	220,319	.....	405,920	405,920
Hotels, guest houses	359,052	.....	359,052	260,050	.....	260,050
Shops with dwellings	319,829	33,489	353,318	618,757	3,298	622,055
Shops only ...	881,545	.....	881,545	381,539	.....	381,539
Offices, banks, warehouses, etc. ...	597,214	109,687	706,901	494,805	212,223	707,028
Factories ...	8,852,970	367,548	9,220,518	6,335,707	467,779	6,803,486
Post offices and telephone exchanges	.....	273,504	273,504	.....	275,911	275,911
Churches ...	33,561	.....	33,561	55,798	.....	55,798
Schools ...	378,247	318,007	696,254	176,467	355,609	532,076
Halls, theatres, etc.	458,564	.....	458,564	338,790	.....	338,790
Hospitals and other public health ...	255,642	701,060	956,702	310,269	1,075,381	1,391,650
Other ...	293,136	316,508	609,644	539,178	313,612	852,790
Total ...	39,893,087	6,444,586	46,337,673	44,017,269	7,322,068	51,339,337

\* See definitions on page 866.

*Buildings Commenced and Completed—N.S.W.—July, 1946 to December, 1947.*

Available information regarding buildings commenced in 1947 indicates that houses and flats to the value of £25,967,000, or 78 per cent. of the total value, were commenced during 1947, and the value of hotels, guest houses and shops with dwellings was £232,000, factories £2,998,000 and other buildings £3,988,000.

The buildings completed in this year included houses and flats to the value of £17,230,000, or 85 per cent. of the total; hotels, guest houses, and shops with dwellings £135,000; factories, £1,524,000, and other buildings £1,373,000.

The following table shows the estimated cost of new buildings—private and Government—commenced and those completed in each quarter since September quarter, 1946; particulars of additions to existing buildings are not included:—

TABLE 756.—New Buildings, Private and Government, Commenced and Completed—N.S.W.—Estimated Cost.  
(Additions are not included.)

Period.	Houses (inc. owner- built).	Flats.	Hotels, Guest Houses, etc.	Shops with Dwellings.	Shops only.	Fac- tories.	Other Build- ings.	Total.
	£000	£000	£000	£000	£000.	£000	£000	£000
<b>New Buildings Commenced.</b>								
1946—September quarter	5,341	121	6	23	36	469	919	6,815
December quarter	4,950	259	11	21	41	1,462	566	7,310
1947—March quarter ...	5,486	197	42	34	32	699	1,861	8,351
June quarter ...	6,245	289	4	41	41	763	499	7,882
September quarter	6,793	197	29	33	43	886	870	8,851
December quarter	6,426	334	...	49	10	650	632	8,101
Year 1947 ...	24,950	1,017	75	157	126	2,098	3,862	33,185
<b>New Buildings Completed.</b>								
1946—September quarter	2,998	24	...	4	4	141	542	3,713
December quarter	3,967	37	...	17	16	224	255	4,516
1947—March quarter ...	3,317	61	33	15	36	258	362	4,082
June quarter ...	4,134	69	1	13	16	225	326	4,784
September quarter	4,497	178	3	22	30	672	294	5,696
December quarter	4,769	205	2	46	32	869	277	5,700
Year 1947 ...	16,717	513	39	96	114	1,524	1,259	20,262

*Building Projects—Private and Government—1939 to 1947.*

The statistics of private buildings for which permits were issued by councils, as summarised in Table 760, are shown in Table 757 in combination with figures regarding Government building, for which information has been collected since July, 1939. The statistics of Government building relate to those for which contracts were let or work commenced or authorised by State or Commonwealth or local authorities.

The total value of private permits (in recorded areas) and Government building was £20,200,000 in 1940 and 1941. Government building represented about 25 per cent. of the total in these years but rose above the value of private permits in the later war period. After the cessation of hostilities there was a rapid increase in building and the total value of private permits (in the same areas as recorded in 1940) and Government building exceeded £44,000,000 in 1947. The proportion of Government building fell below 17 per cent. in this year.

Of the total value of private building permits dwellings constituted approximately 80 per cent. in 1940 and 1941, but only 18 per cent. in 1943; the proportion exceeded former level in 1945 and 1947.

TABLE 757.—Building Projects, Private and Government—N.S.W.—  
Estimated Cost, 1939 to 1947.

Year.	Sydney and Suburbs.			Rest of New South Wales.			Total (as far as recorded).		
	Private.	Government.	Total.	Private.*	Government.	Total.	Private.*	Government.	Total.
	£000	£000	£000	£000	£000	£000	£000	£000	£000
Years ended 30th June.									
1939-40	11,437	1,053	12,490	5,052	1,537	6,589	16,489	2,590	19,079
1940-41	12,006	1,477	13,483	4,623	2,501	7,124	16,629	3,978	20,607
1941-42	5,969	1,329	7,298	3,364	4,155	7,519	9,333	5,484	14,817
1942-43	1,400	2,847	4,247	468	2,675	3,143	1,868	5,522	7,390
1943-44	1,365	1,856	3,221	625	1,005	1,630	1,990	2,861	4,851
1944-45	2,186	2,304	4,490	1,429	2,617	4,046	3,615	4,921	8,536
1945-46	11,232	4,015	15,247	9,693	2,061	11,754	20,925	6,076	27,001
1946-47(a)	21,216	4,382	25,598	15,617	2,783	18,400	36,833	7,165	43,998
1946-47(b)	21,216	4,382	25,598	20,285	2,783	23,068	41,501	7,165	48,666
Calendar Years.									
1940	11,718	894	12,612	4,887	2,672	7,559	16,605	3,566	20,171
1941	10,847	1,725	12,572	4,758	2,904	7,662	15,605	4,629	20,234
1942	1,446	1,371	2,817	1,079	3,932	5,011	2,525	5,303	7,828
1943	1,361	3,109	4,470	508	1,574	2,082	1,869	4,683	6,552
1944	1,603	1,606	3,209	869	2,304	3,173	2,472	3,910	6,382
1945	5,271	3,662	8,933	4,630	1,638	6,268	9,901	5,300	15,201
1946	18,070	3,794	21,864	13,506	2,651	16,157	31,576	6,445	38,021
1947(a)	20,252	4,299	24,551	16,596	3,023	19,619	36,848	7,322	44,170
1947(b)	20,252	4,299	24,551	21,565	3,023	24,588	41,817	7,322	49,139

\* As far as recorded—see paragraph above Table 759.

(a) For same areas as in earlier years.

(b) For all local government areas.

The number of new dwellings for which private permits were issued or Government building was undertaken in the years 1940 to 1947 and the estimated cost of the dwellings and other buildings are shown below:—

TABLE 758.—Building Projects, Private and Government—N.S.W.  
New Dwellings and Other Buildings.

Year.	Number of New Dwellings.		Estimated Cost (including Additions and Alterations).						
	Private.*	Government.	Dwellings.		Other Buildings.		Total.		
			Private.*	Government.	Private.*	Government.	Private.*	Government.	Total.
			£000	£000	£000	£000	£000	£000	£000
1940 ...	14,503	38	12,846	39	3,759	3,527	16,605	3,566	20,171
1941 ...	14,912	521	12,842	336	2,763	4,293	15,605	4,629	20,234
1942 ...	1,468	870	1,043	350	1,482	4,953	2,525	5,303	7,828
1943 ...	509	341	334	126	1,535	4,557	1,869	4,683	6,552
1944 ...	1,120	327	764	349	1,708	3,561	2,472	3,910	6,382
1945 ...	8,649	2,000	8,238	2,428	1,663	2,872	9,901	5,300	15,201
1946 ...	19,569	5,147	24,491	4,358	7,085	2,087	31,576	6,445	38,021
1947 (a)	21,131	5,301	30,899	4,621	5,949	2,701	36,848	7,322	44,170
1947 (b)	20,183	5,301	35,445	4,621	6,372	2,701	41,817	7,322	49,139

\* In recorded areas—see paragraph above Table 759. (a) For same areas as in earlier years.

(b) For all local government areas.

The number of new dwellings—houses, dwellings in flats or attached to shops, hotels and guest houses—for which (private) permits were issued by councils in recorded areas exceeded 14,500 in 1940 and was somewhat greater in 1941. The aggregate number in the next three years was only 3,100. Most of the Government dwellings in these years were intended for workers in war industries and some were only temporary structures.

With the cessation of active warfare the pent-up demand for housing stimulated building enterprise. The number of private permits for dwellings rose to 19,569 in recorded areas in 1946; in the following year the number was 21,131 in these areas, and 26,183 in all local areas. More than 5,300 Government dwellings (including military hut conversions) were authorised in each of these two years.

*Building Permits issued by Councils, 1937 to 1947.*

Statistics of private building operations, as shown in Tables 759 to 765, relate to permits issued by councils of municipalities and shires. The particulars for 1946 and earlier years refer to permits issued in the city and suburbs of Sydney, 129 country towns and the following shires, in which building ordinances were operative, viz., Warringah (except Kuring-gai Chase), Sutherland (except defined easterly section), and (as to towns and villages), Hornsby, Baulkham Hills, Blacktown, Blue Mountains and Bulli. Statistics of private building permits issued by councils in 1947 are available for all local government areas and data for this year are shown in the tables, for purposes of comparison (a) in the same areas as were recorded in 1946 and (b) in all local areas.

The number of permits issued for new buildings, the number of dwellings therein and estimated cost of the buildings for which permits were issued in 1947 are shown below:—

TABLE 759.—Building Permits issued by Councils, 1947.

Buildings.	Permits Issued for New Buildings.	Dwellings in New Buildings.	Estimated Cost.		Total.
			New Buildings.	Additions and Alterations.	
	No.	No.	£	£	£
<b>Houses—</b>					
Brick ... ..	7,900	7,900	13,929,815	2,082,709	33,038,955
Wood ... ..	3,042	3,042	2,989,401		
Fibro-cement ... ..	13,742	13,742	14,046,030		
Total Houses ... ..	24,684	24,684	30,956,246		
<b>Flats—</b>					
New ... ..	229	1,049	1,392,448	16,491	1,460,054
Conversions ... ..	66	167	52,015		
Total Flats ... ..	295	1,216	1,444,463		
<b>Hotels, Guest Houses, etc.</b> ... ..	20	20	299,984	179,714	479,698
<b>Shops with Dwellings</b> ... ..	201	244	465,837	235,844	1,036,238
<b>Shops only</b> ... ..	237	...	334,557	2,171,098	3,852,329
<b>Factories...</b> ... ..	410	...	1,681,231		
<b>Other Buildings</b> ... ..	886	19	1,018,730	930,535	1,949,265
Total ... ..	26,733	26,183	36,201,048	5,616,391	41,817,439

The estimated cost of buildings for which permits were issued by councils in each year, 1937 to 1947, is shown in Table 760. The particulars are classified into groups of municipalities and shires: (1) City of

Sydney and suburban municipalities, (2) the municipalities and shires which, with Sydney and suburbs, comprise the County of Cumberland, viz., the extra-metropolitan portion of the municipality of Holroyd; ten other municipalities and five of the shires named above Table 759 (also Nepean Shire in 1947); and (3) the other local areas for which records are available: that is (a) in each year, 118 country towns outside County of Cumberland and the Shires of Bulli and Blue Mountains, and (b) in 1947, all municipalities and shires outside County of Cumberland.

TABLE 760.—Private Building Permits issued by Councils—Estimated Cost.  
(Government Buildings are not included.)

Year.	City of Sydney,	Suburbs.	Total, Metro- polis.	Balance of Cumberland.	Total, County of Cumberland.	Rest of N.S.W. (as far as recorded).*	Total of Foregoing.
	£.	£.	£.	£.	£.	£.	£.
1937 ...	2,543,601	8,716,806	11,260,407	964,572	12,224,979	4,431,422	16,656,401
1938 ...	3,409,586	10,632,633	14,042,219	1,341,783	15,384,002	4,987,987	20,371,989
1939 ...	1,885,522	10,333,945	12,219,467	1,360,035	13,579,502	4,002,130	17,581,632
1940 ...	1,534,207	10,184,032	11,718,239	1,416,685	13,134,924	3,470,514	16,605,438
1941 ...	552,021	10,206,380	10,847,401	1,488,328	12,335,729	3,269,627	15,605,356
1942 ...	270,951	1,174,687	1,445,638	199,472	1,645,110	879,565	2,524,675
1943 ...	248,446	1,112,197	1,360,643	139,057	1,499,700	369,331	1,869,031
1944 ...	332,054	1,270,874	1,602,928	352,983	1,955,911	516,419	2,472,330
1945 ...	264,231	5,007,077	5,271,308	2,676,688	7,947,996	1,953,009	9,901,005
1946 ...	1,213,194	16,856,993	18,070,187	6,830,534	24,900,721	6,675,910	31,576,631
1947 (a) ...	1,314,743	18,937,314	20,252,057	7,944,250	28,196,307	8,651,549	36,847,856
1947 (b) ...	1,314,743	18,937,314	20,252,057	7,944,250	28,196,307	13,621,132	41,817,439

\* See paragraph above Table 759.

(a) Total for same areas as in 1937 to 1946.

(b) Total for all local government areas.

The average annual value of building permits issued in recorded areas was nearly £17,400,000 in the five years 1937 to 1941. When drastic restrictions were imposed upon building the value fell to £2,525,000 in 1942 and further to £1,869,000 in 1943. As restrictions were relaxed the value rose to £9,901,000 in 1945 and to £31,577,000 in 1946, the first full year of the post-war period.

The value in 1947 in the same areas as recorded in earlier years was £36,848,000, or more than double the pre-war average; the increase was due in part to higher building costs.

#### *Building Permits for Dwellings—Sydney and Suburbs, 1937 to 1947.*

The number and estimated cost of dwellings, including those added by conversion of existing dwellings into flats, for which private permits were issued in Sydney and suburbs in each year since 1937, are shown in Table 761.

TABLE 761.—Building Permits for Dwellings—Sydney and Suburbs.  
(Government buildings not included)

Year.	Houses.		Dwellings in Flats.		Hotels, Guest Houses, etc.	Dwellings Attached to Shops.	Total New Dwellings.	Alter- ations and Additions.	Total Dwellings.
	Brick, Concrete and Stone.	Fibro- Cement, Wood, etc.	New.	Con- versions.					
Number of New Dwellings.									
1937 ...	3,702.	1,150	3,436	494	16	123	8,926	...	...
1938 ...	4,652.	1,685	5,184	419	21	218	12,179	...	...
1939 ...	4,186	1,661	3,761	338	25	176	10,137	...	...
1940 ...	4,249	1,457	3,802	219	18	96	9,841	...	...
1941 ...	5,063	1,407	3,318	149	4	59	10,000	...	...
1942 ...	124	108	22	10	...	1	265	...	...
1943 ...	5	78	2	17	...	1	103	...	...
1944 ...	49	302	...	60	...	...	411	...	...
1945 ...	1,526	2,334	20	94	3	3	3,980	...	...
1946 ...	4,200	4,499	462	116	2	40*	9,819	...	...
1947 ...	4,945	3,943	843	86	5	85*	9,907	...	...
Estimated Cost of Dwellings.									
	£000	£000	£000	£000	£000	£000	£000	£000	£000
1937 ...	3,365	514	2,004	153	198	129	6,423	646	7,069
1938 ...	4,473	858	3,257	118	725	236	9,667	681	10,348
1939 ...	4,144	862	2,657	94	398	186	8,341	592	8,933
1940 ...	4,375	833	2,585	63	301	124	8,281	744	9,025
1941 ...	5,415	903	2,131	41	5	73	8,568	451	9,019
1942 ...	131	61	18	2	...	1	213	55	268
1943 ...	2	28	1	2	...	1	34	72	106
1944 ...	31	140	...	7	...	...	178	145	323
1945 ...	1,796	1,929	19	17	29	2	3,792	340	4,132
1946 ...	6,668	4,641	575	50	13	53	12,000	711	12,711
1947 ...	9,110	4,555	1,174	32	63	164	15,098	904	16,002

\* Includes dwellings attached to other buildings, viz., 6 in 1946 and 4 in 1947.

Permits were issued for approximately 10,000 dwellings in Sydney and suburbs in each of the years, 1939 to 1941. In the next three years few permits for dwellings were issued and the annual average was only 260 but the pre-war level was regained in 1947. The dwellings proposed in 1939 consisted of 5,847 individual houses representing 58 per cent. of the total, 4,089 dwellings in flats, 40 per cent., 25 hotels and 176 dwellings attached to shops. In 1947 individual houses numbered 8,888 or 90 per cent., dwellings in flats 929 or 9 per cent., and permits were issued for only 5 hotels or guest houses and 85 other dwellings.

The estimated cost per dwelling has risen substantially since 1939 when the aggregate cost of 10,137 dwellings, as estimated, was £8,341,000, as compared with an aggregate of £15,098,000 for 9,907 dwellings in 1947. In the earlier year the average estimate as stated in the permits, was £1,000 for houses of brick, concrete, stone, and £520 for houses of wood, fibro-cement, etc., and the corresponding averages were £1,840 and £1,160 in 1947. The averages indicate the trend but do not serve to measure the actual increase in cost of building because there were marked changes in size, design and equipment of dwellings during the period under review.

#### *Building Permits—County of Cumberland, 1937 to 1947.*

As population spread from the more densely populated areas, building enterprise became very active in the extra-metropolitan portion of the County of Cumberland. The county comprises in addition to Sydney and suburbs, part of the municipality of Holroyd (the balance being within the metropolitan boundaries) ten other municipalities and six shires. The total area is about 1,500 square miles of which Sydney and suburbs occupy 245 square miles.

Particulars of the building permits for new dwellings and additions and alterations to existing dwellings in the County of Cumberland are shown below:—

TABLE 762.—Building Permits for Dwellings—County of Cumberland.  
(Government buildings not included.)

Year.	New Dwellings.						Alterations and Additions.	Total Dwellings	
	Houses.		Dwellings in Flats.		Hotels, Guest Houses, etc.	Dwellings Attached to Shops.			Total New Dwellings.
	Brick, Concrete and Stone.	Fibro-cement, Wood, etc.	New.	Conversions.					
Number of New Dwellings.									
1937 ...	3,974	2,330	3,454	499	19	147	10,423	...	
1938 ...	4,985	3,042	5,224	426	27	239	13,943	...	
1939 ...	4,573	3,084	3,784	342	27	199	12,009	...	
1940 ...	4,610	2,755	3,844	219	21	117	11,566	...	
1941 ...	5,493	2,730	3,392	154	5	74	11,848	...	
1942 ...	176	348	22	12	...	1	559	...	
1943 ...	6	283	2	19	...	1	311	...	
1944 ...	70	709	...	60	...	...	839	...	
1945 ...	1,990	4,812	24	98	3	4	6,931	...	
1946 ...	5,275	8,931	494	123	7	101*	14,931	...	
1947 ...	6,411	8,144	879	88	8	134*	15,664	...	
Estimated Cost of Dwellings.									
	£000	£000	£000	£000	£000	£000	£000	£000	
1937 ...	3,650	953	2,076	154	210	141	7,184	717	
1938 ...	4,796	1,420	3,282	122	782	260	10,662	811	
1939 ...	4,563	1,481	2,684	94	463	208	9,493	683	
1940 ...	4,774	1,443	2,617	63	339	141	9,377	862	
1941 ...	5,917	1,577	2,201	41	6	92	9,834	543	
1942 ...	169	152	18	2	...	1	342	72	
1943 ...	2	85	1	2	...	1	91	96	
1944 ...	47	315	...	7	...	...	369	198	
1945 ...	2,257	3,863	23	17	29	2	6,191	496	
1946 ...	8,355	8,996	616	53	58	135	18,213	1,087	
1947 ...	11,648	9,197	1,233	35	74	248	22,435	1,228	

\* Includes dwellings attached to other buildings, viz., 11 in 1946 and 8 in 1947.

The post-war increase in private building has been greatest in the outer suburbs of Sydney and in the extra-metropolitan portion of the County of Cumberland. In the Illawarra-Bankstown group of suburbs the estimated cost of new dwellings for which permits were issued was £5,880,000 in 1947 as compared with £1,825,000 in 1939—expansion being greatest in Bankstown, Canterbury and Hurstville. In the northern suburbs where the value was £5,809,000 in 1947 as compared with £2,572,000 in 1939, the increase occurred mainly in Ku-ring-gai, Ryde, Willoughby and Lane Cove. In the extra-metropolitan section of the county the estimated cost of new dwellings was as much as £7,337,000 in 1947 as compared with £1,153,000 in 1939. In this group, large increases occurred in the municipality of Holroyd (partly within the outer western suburban group) and in three shires, where the value of permits for new dwellings in 1947 was Hornsby, £1,093,000, Warringah, £1,980,000, and Sutherland, £1,940,000.

The estimated cost of new buildings, other than dwellings, for which permits were issued in the County of Cumberland in 1946 and 1947 was not appreciably greater than pre-war. Some expansion occurred in Illawarra-Bankstown and Western Suburbs, but recent activity in this class of building has consisted mainly of alterations and additions.



TABLE 763.—Building Permits—County of Cumberland—in Groups of Areas.

(Government buildings not included.)

Year.	New Buildings.								Alterations and Additions to existing buildings.	Total, County of Cumberland.
	City of Sydney.	Suburbs.						Balance of Cumberland.		
		Inner Industrial.	Illawarra Bankstown.	Inner Western.	Outer Western.	Northern.	Eastern.			
	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000
Dwellings.										
1937 ...	473	239	1,304	675	249	1,914	1,570	760	717	7,901
1938 ...	1,466	291	2,097	932	326	2,429	2,126	995	811	11,473
1939 ...	401	329	1,825	721	372	2,572	2,121	1,153	683	10,177
1940 ...	360	353	1,941	658	271	2,793	1,905	1,096	862	10,239
1941 ...	97	421	2,177	760	340	3,346	1,427	1,266	543	10,377
1942 ...	...	5	106	13	7	69	13	129	72	414
1943 ...	...	3	21	1	4	5	...	58	95	187
1944 ...	...	1	114	3	19	36	5	191	198	567
1945 ...	25	80	1,873	135	443	1,112	124	2,399	496	6,687
1946 ...	6	252	5,255	618	1,122	4,291	456	6,213	1,087	19,300
1947 ...	95	248	5,880	758	1,286	5,809	1,022	7,337	1,228	23,663
Other Buildings.										
1937 ...	1,496	395	83	193	87	194	350	93	1,433	4,324
1938 ...	1,256	314	92	39	42	312	94	70	1,692	3,911
1939 ...	852	553	70	68	164	171	63	60	1,402	3,403
1940 ...	283	582	110	74	79	71	47	139	1,511	2,896
1941 ...	56	236	57	43	13	148	15	77	1,314	1,959
1942 ...	65	158	12	73	61	35	1	22	804	1,231
1943 ...	20	102	8	23	60	8	3	15	1,074	1,313
1944 ...	1	149	10	47	35	9	4	20	1,114	1,389
1945 ...	4	106	17	37	62	45	19	25	946	1,261
1946 ...	98	418	406	290	253	236	752	81	3,062	5,601
1947 ...	394	321	401	191	255	118	26	211	2,616	4,533
All Buildings.										
1937 ...	1,969	634	1,387	868	336	2,108	1,920	853	2,150	12,225
1938 ...	2,722	605	2,189	971	368	2,741	2,220	1,065	2,503	15,384
1939 ...	1,253	882	1,895	789	536	2,743	2,184	1,213	2,085	13,580
1940 ...	643	935	2,051	732	350	2,864	1,952	1,235	2,373	13,135
1941 ...	153	657	2,234	803	353	3,494	1,442	1,343	1,857	12,336
1942 ...	65	163	118	86	68	104	14	151	876	1,645
1943 ...	20	105	29	24	64	13	3	73	1,169	1,500
1944 ...	1	150	124	50	54	45	9	211	1,312	1,956
1945 ...	29	186	1,890	172	505	1,157	143	2,424	1,442	7,948
1946 ...	104	670	5,661	908	1,380	4,527	1,208	6,294	4,149	24,901
1947 ...	489	569	6,281	949	1,541	5,927	1,048	7,548	3,844	28,106

*Building Permits for Dwellings—Country Areas—1937 to 1947.*

Statistics of building permits for new dwellings, as far as recorded, in areas outside the County of Cumberland in the years 1937 to 1947, and the estimated cost of alterations and additions to existing dwellings are shown below. The particulars for the years, 1937 to 1946, were recorded in 118 towns (including industrial centres such as Newcastle and Wollongong) and the Shires of Blue Mountains and Bulli; the details for 1947 are shown for (a) these areas and (b) all local areas outside County of Cumberland.

TABLE 764.—Building Permits for Dwellings—Country Areas.

(Government buildings are not included).

Year.	New Dwellings.							Total Dwellings.	
	Houses.		Dwellings in Flats.		Hotels, Guest Houses, etc.	Dwellings attached to Shops.	Total New Dwellings.		Alterations and Additions.
	Brick, Concrete and Stone.	Fibro-cement, Wood, etc.	New.	Conversions.					
Number of New Dwellings.									
1937 ...	830	2,767	157	79	25	98	3,956	...	
1938 ...	748	3,244	164	80	20	90	4,346	...	
1939 ...	634	2,851	156	101	16	94	3,822	...	
1940 ...	513	2,151	87	108	20	58	2,937	...	
1941 ...	631	2,188	123	96	3	23	3,064	...	
1942 ...	133	693	10	66	2	5	909	...	
1943 ...	8	160	...	29	...	1	198	...	
1944 ...	14	235	...	32	...	...	281	...	
1945 ...	234	1,428	4	44	3	5	1,718	...	
1946 ...	861	3,468	77	140	7	85*	4,638	...	
1947 (a)	1,146	4,056	111	62	9	85*	5,469	...	
1947 (b)	1,489	8,640	170	79	12	129*	10,519	...	
Estimated Cost of Dwellings.									
	£000	£000	£000	£000	£000	£000	£000	£000	
1937 ...	768	1,445	81	14	339	165	2,812	485	
1938 ...	747	1,750	121	23	295	120	3,056	468	
1939 ...	633	1,606	123	22	193	107	2,684	480	
1940 ...	537	1,267	61	18	247	86	2,216	391	
1941 ...	677	1,375	84	16	20	32	2,204	261	
1942 ...	122	384	9	5	3	4	527	102	
1943 ...	6	52	...	3	...	5	66	81	
1944 ...	9	93	...	3	...	...	105	93	
1945 ...	260	1,002	2	7	43	5	1,319	232	
1946 ...	1,209	3,201	82	25	32	97	4,646	545	
1947 (a)	1,803	4,307	112	13	221	136	6,592	644	
1947 (b)	2,282	7,829	160	17	226	217	10,731	1,051	

(a) and (b) See paragraph above this table. \* Includes dwellings attached to buildings other than shops, viz., 16 in 1946 and 11 in 1947.

The number of new dwellings for which permits were issued in recorded areas (ex County of Cumberland) in 1939 was 3,822 and estimated cost was £2,684,000. In 1947 the number was 5,469 and the estimated cost £6,592,000 in these areas and permits for 5,050 new dwellings to cost £4,139,000 were issued in the areas where the information was recorded for the first time in this year.

More than .95 per cent. of these dwellings were individual houses, the majority to be constructed of fibro-cement or wood.

The estimated cost of the buildings for which permits were issued in various towns during the years 1929 to 1947 is shown below. The Statistical Register issued annually contains details for each town for which the records of building permits are available:—

TABLE 765.—Building Permits—Various Towns—1929 to 1947.  
(Government buildings not included.)

Year.	Greater Newcastle.		Greater Wollongong.		Broken Hill.	Albury.	Goulburn.	Lismore.	Orange.	Tamworth.	Wagga Wagga.
	New Dwellings.	Other.	New Dwellings.	Other.							
	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000
1929	373	194	306	142	28	153	149	112	152	133	131
1930	140	93	95	65	121	54	26	121	43	67	38
1931	46	45	12	26	16	8	15	48	10	13	7
1932	27	68	22	19	15	17	24	89	11	11	12
1933	71	72	42	19	12	62	38	51	13	25	35
1934	208	112	213	46	17	47	65	108	30	65	86
1935	441	261	227	64	46	64	87	137	50	80	113
1936	554	399	342	138	42	145	102	143	86	88	121
1937	539	235	573	292	96	155	56	136	136	85	138
1938	600	230	695	498	305	192	77	148	82	110	148
1939	589	265	490	114	159	86	52	138	73	63	212
1940	562	405	336	79	106	117	46	153	43	70	129
1941	607	419	437	75	69	84	25	72	59	91	116
1942	56	86	72	26	27	17	38	13	30	23	18
1943	16	87	14	48	10	5	14	6	2	11	14
1944	29	136	23	63	6	22	32	7	2	7	5
1945	369	141	268	54	26	47	53	29	26	63	47
1946	649	431	570	180	181	206	121	300	94	152	289
1947	945	421	965	177	458	273	149	284	187	180	335

Particulars shown above regarding permits issued since 1929 in Newcastle and Wollongong relate to the area of each city as constituted in 1947 and embrace the local areas amalgamated with Newcastle in 1938 and with Wollongong in 1947.

The estimated cost of proposed buildings in Broken Hill in 1938 included £145,000 for a public hospital.

In addition to the towns listed in the table, the value of building permits exceeded £100,000 in 1946 or 1947 in the following municipalities and shires:—

Municipalities.		1946	1947	Shires.		1947
		£	£			£
City of Blue Mountains*	...	396,324	482,270	Lower Hunter	...	781,898
Grafton and South Grafton	...	310,159	243,835	Gosford	...	626,782
Casino	...	132,394	184,685	Wyong	...	296,926
Maitland	...	151,717	172,040	Tumut	...	238,569
Taree	...	72,747	138,279	Tweed	...	236,351
Dubbo	...	108,534	127,294	Dorrigo	...	160,095
Berry	...	36,397	125,591	Port Stephens	...	127,285
Kempsey	...	72,703	124,909	Wade	...	122,288
Inverell	...	104,930	121,345	Leeton	...	117,947
Shellharbour	...	47,678	102,722	Kearsley	...	107,623

\* As constituted in 1947; formerly the Municipalities of Katoomba and Blackheath and Shire of Blue Mountains.

## GOVERNMENT HOUSING ACTIVITIES.

In 1912 a Housing Board was appointed in New South Wales to administer Government measures for overcoming a shortage of dwellings. During its term, the Board erected 818 dwellings for sale on extended payment terms in various localities in metropolitan and country localities and provided advances in respect of 516 properties. The Board was abolished in 1924; its functions were vested in the Minister for Local Government with a view to terminating its activities, and the work of collecting outstanding instalments of purchase money and advances was transferred to the Government Savings (now Rural) Bank. Subsequently, plans were developed to provide assistance for home builders in the form of advances and the encouragement of co-operative building societies which are described later in this chapter.

In 1934 the Homes for Unemployed Trust was constituted to assist unemployed and necessitous persons to obtain homes. The Trust erected homes and let them on the rent-purchase system and supplied building materials with easy terms of repayment or in many cases, free of charge, for the erection or repair of temporary shelters.

In February, 1937, the State Government appointed the Housing Improvement Board to report upon unsatisfactory housing conditions and to formulate plans for improvement. The Board, after survey, prepared tentative schemes for improving congested areas in the industrial suburbs of Sydney, but these were not accepted by the councils concerned. Subsequently the Board undertook, as a demonstration project, the improvement of Erskineville Park. Blocks of flats containing 56 dwellings and ancillary buildings were erected and the dwellings were let to families, who had been living in sub-standard houses.

*Housing Commission of New South Wales.*

A Ministry of Housing was created in May, 1941, the Housing Act was passed in November of the same year, and the Housing Commission of New South Wales was constituted in February, 1942, as executive authority to administer State housing plans.

The Commission consists of the Chairman—a full-time salaried officer—and four other members remunerated by fees.

The functions formerly exercised by the Housing Board under the Housing Act of 1912 and later vested in the Minister were transferred to the Housing Commission, also the functions of the Housing Improvement Board and the Homes for Unemployed Trust and the administration of the Dacey Garden Suburb (built by the State in 1912) and the Erskineville project. Lending activities previously conducted by certain housing and building agencies in the Government Agency Department of the Rural Bank were discontinued and the Housing Commission was authorised to make advances in respect of these schemes and in terms of the Housing Act, as amended.

The Housing Commission is required to conduct investigations as to measures for co-ordinating its activities with those of co-operative building societies and the Rural Bank in relation to housing, and to secure the co-operation of local government bodies in the provision of adequate housing on reasonable terms or at reasonable rentals.

The capital resources of the Commission consist of moneys advanced by the State Treasurer or appropriated by Parliament and those derived

from existing housing activities. The funds for a Government housing programme under the agreement described below are advanced by the Commonwealth to the State Treasurer.

*Commonwealth Directorate of Housing.*

Commonwealth functions relating to housing are exercised by the Directorate of Housing in the Department of Works and Housing. The Directorate administers the Commonwealth-State agreement and undertakes technical and economic research in relation to housing and building materials and the allocation of certain essential building materials amongst the States.

An experimental building station has been established by the Commonwealth in New South Wales at Ryde, a suburb of Sydney.

*Commonwealth-State Housing Agreement.*

In the early years of the war the Housing Commission of New South Wales acted as constructing authority in this State for the Commonwealth War Workers' Housing Trust in the erection of temporary homes and hostels for workers in munition factories and a number of permanent homes for war workers in country towns. The erection of these dwellings—996 homes and five hostels—was concluded in October, 1944. Subsequently the war-time arrangements with the Commonwealth were merged into an agreement which was approved by the Commonwealth and States in November, 1945, and ratified by the Parliament of New South Wales in April, 1946.

The Commonwealth has agreed to advance to the State (a) moneys expended by the State on war-time housing projects between 3rd December, 1943, and the date of the agreement; and (b) moneys required during the next ten years for the State's housing projects. The advances are repayable by the State in equal annual instalments of principal and interest over a maximum period of fifty-three years. The rate of interest on each advance must not exceed the rate payable on the long-term Commonwealth loan last raised prior to date of the advance or being raised at such date.

The State must ensure that it has adequate statutory power to control (a) rental housing projects under the agreement; (b) slum-clearance; and (c) town planning. The agreement relates primarily to rental projects but the State may sell a dwelling after completion, the Commonwealth Treasurer's consent being required if the sale price is less than capital cost. The full purchase price is payable to the Commonwealth, and any loss resulting from the sale is to be shared by the Commonwealth.

Homes erected under the agreement are allocated on a basis of "needs," amongst persons requiring proper housing; at least 50 per cent. are provided for members or ex-members of the Forces, persons who served during the war in the Merchant Navy and their dependants. In New South Wales approved applicants for homes are classified into groups and each applicant is admitted to ballot for the homes allocated to his group. The ballots are conducted by the Housing Commission as dwellings become available for allocation.

The weekly rent of the dwellings as calculated in terms of the agreement and termed the "economic rent," includes allowance for interest and repayment of principal, maintenance, rates and taxes, insurance and administration. Where a dwelling is let to a family with low income, rebate of rent may be granted. The rebate is the difference between the economic rent and one-fifth of the family income, where the income is equal to the basic wage, and it is increased or decreased if the income is less or more than the basic wage; but the rent of a dwelling may not be less than 8s. a week.

Losses incurred by the State in connection with the administration of housing projects under the agreement and any loss resulting from the sale of dwellings are to be borne by the Commonwealth as to 60 per cent. and the State 40 per cent.

The majority of dwellings provided by the Housing Commission were erected under the Commonwealth-State agreement. In addition to these permanent homes, dwelling units were provided by the conversion of military hutments for temporary occupation by families in urgent need of accommodation.

The number of dwellings commenced and completed by the Housing Commission in the years 1944 to 1947, and the number of dwelling units provided by converted military huts are shown below:—

TABLE 766.—Dwellings commenced and completed by Housing Commission of New South Wales, 1944 to 1947.

Year.	Dwellings in Houses and Flats.				Dwellings in Military Huts Converted.
	Commenced.		Completed.		
	Number.	Cost.	Number.	Cost.	
		£		£	
1944 ... ..	317	332,887	42	38,485	...
1945 ... ..	1,906	2,248,303	851	869,946	64
1946 ... ..	3,483	4,001,368	1,802	2,094,407	1,535
1947 ... ..	3,249	3,791,128	2,337	2,693,018	1,717
Total to 31st Dec., 1947... ..	8,955	10,373,686	5,032	5,695,856	3,316

The number of persons housed in the permanent and temporary dwellings provided by the Housing Commission was approximately 40,000 at 31st December, 1947.

#### ADVANCES FOR HOMES.

The principal scheme for governmental advances for the assistance of persons seeking to acquire a home is administered by the Rural Bank—formerly the Government Savings Bank of New South Wales—in the Advances for Homes Department.

Operations under the scheme were commenced on 1st July, 1914. Advances were made from the funds of the Bank to assist applicants to erect, purchase or enlarge a home or to discharge a mortgage thereon. The limit of an advance was 75 per cent. of the Bank's valuation of the property up to a maximum of £750; it was raised to £1,000 in 1928 and to £1,200 in 1944. Since 1st January, 1946, the limit has been 80 per cent. of valuation up to £1,800. For the most part, assistance under the scheme has been granted as advances within these limits, though in 1928 the Bank was authorised to advance up to 90 per cent. of valuation but not exceeding £1,000, the building contract being controlled by the Department. At the same time funds of the Commonwealth Savings Bank were made available to the Department in terms of the Commonwealth Housing Act, 1927, to make advances up to 90 per cent. of valuation with a maximum of £1,800.

The Home Building Scheme Agency was constituted in 1934 to supplement amounts advanced by the Advances for Homes Department by a further loan from Government funds up to 10 per cent. of valuation—but not more than £200 in any case.

In March, 1940, a special scheme was initiated to assist persons in the lower wage groups to erect dwellings at moderate cost or to purchase homes erected by the Bank on land acquired by it. Advances up to 90 per cent. of the Bank's valuation were made by the Advances for Homes Department, and a further sum up to 5 per cent. was provided from Government moneys through the Home Building Scheme Agency. The maximum advance was fixed at £700. The number of homes erected under this scheme was 126 as at 30th June, 1942, when these advances were discontinued.

The Building Relief Scheme was initiated in 1932 with the object of relieving unemployment in the building trades. Loans were made for repairs or additions to dwellings and business premises and the erection of small homes in rural areas. The scheme was administered in the Government Agency Department of the Rural Bank from 1st July, 1935.

The Government Housing Agency administered accounts relating to the repayment of advances made by the Housing Board, which was dissolved in 1924.

The Soldiers' Families Housing Agency was organised in terms of an Act passed in 1941 to make advances from Government funds to members of the Forces serving in the war or to wives or widows of members to enable them to erect, complete or enlarge dwellings. Owing to war-time restrictions on building, only a few loans were advanced.

From 31st October, 1942, the activities of the Rural Bank through the Home Building and Building Relief Schemes, Government Housing and Soldiers' Families Housing Agencies were confined to the administration and collection of loans outstanding at that date, and the Housing Commission was authorised to make the advances.

Particulars of advances for homes by the Rural Bank and Government Agencies, and, since 1942-43, the Housing Commission, are shown in Table 767; further details are contained in the chapter "Private Finance."

TABLE 767.—Advances for Homes and Building—Rural Bank and Government Agencies.

Year ended 30th June.	Advances for Homes Department, Rural Bank.	Home Building Scheme.	Government Housing.	Building Relief Scheme.	Soldiers' Families Housing.	Homes for Unemployed.
	£	£	£	£	£	£
1937 ...	854,214	62,575	4,396	79,171	.....	59,871*
1938 ...	818,579	1,621	5,164	85,692	.....	51,234*
1939 ...	513,554	180	4,502	100,619	.....	57,699*
1940 ...	456,266	85	4,791	78,326	.....	67,756*
1941 ...	648,100	16,720	3,087	45,047	.....	38,774*
1942 ...	497,861	8,443	1,051	37,987	6,896	7,185†
1943 ...	186,931	1,540	675	4,613	183	5,100
1944 ...	142,949	514		1,814	1,285	6,004
1945 ...	231,108	1,245		4,248	95	8,812
1946 ...	1,023,212	43,540		1,515	91	6,539

\* Calendar year.

† Six months January to June, 1942.

The loans outstanding in respect of these advances as at 30th June, 1946, were as follows:—

Advances for Homes Department, £7,996,739; Home Building and Government Housing Schemes, £258,843; Building Relief, £81,981; Soldiers' Families Housing, £6,599; Homes for Unemployed, £150,930.

#### *Housing Advances by Commonwealth Bank.*

The Commonwealth Bank is authorised to provide credit foncier loans to assist individuals to acquire a home. The loans have been available since 2nd January, 1946 for erection or for the purchase of newly-erected homes. The maximum loan is £1,250 or 85 per cent. of the Bank's valuation of the security. Loans approved in New South Wales up to 30th June, 1946, amounted to £438,480 of which £21,738 had been advanced at that date.

#### CO-OPERATIVE BUILDING SOCIETIES.

Co-operative Building Societies, described in the chapter "Private Finance," of this Year Book, assist members to finance the building or acquisition of homes. In 1937, the Government of New South Wales appointed an advisory committee to foster the growth of the societies. The committee selected as most suitable for the purpose a type of terminating building society which obtains funds from outside sources and makes advances to members when they require them. On joining a society, the member takes up the number of shares which corresponds with the amount he intends to borrow. The rates of contribution are related to the term of the society, and the rate payable by a member prior to advance is increased when he obtains a loan. When all shares have been advanced and external obligations have been met, the society is wound up.

The Government has assisted the societies to obtain requisite funds by guaranteeing the repayment of loans made to them by banks, insurance societies and other approved bodies, thus enabling the societies to advance to members as much as 90 per cent. of the valuation of the security offered. By amendment of the law in March, 1945, the societies were authorised to advance under certain conditions 100 per cent. of valuation, but not more than £1,250 in such cases.



Building societies of the type recommended by the committee have made remarkable progress. At 31st March, 1948 there were 476 societies with funds available for advances, and 449 were operating with Government guarantee. The number of members was 39,516 and 664,503 shares were held by existing members. Metropolitan societies numbered 315, with 26,889 members, and 447,262 shares; and country societies 161, with 13,127 members and 217,241 shares.

Particulars of the loans approved and advances made by the societies with Government guarantee are as follows:—

TABLE 768.—Terminating Building Societies with Government Guarantee—Advances, 31st March, 1948.

Purpose of Loan.	Metropolitan Societies.				Country Societies.				Total.			
	Loans Approved.		Advances Made.		Loans Approved.		Advances Made.		Loans Approved.		Advances Made.	
	No.	Am't	No.	Am't	No.	Am't	No.	Am't	No.	Am't	No.	Am't
		£000		£000		£000		£000		£000		£000
Erection ...	13,355	12,690	11,428	9,388	7,134	5,690	6,321	4,446	20,489	18,380	17,749	13,834
Purchase ...	8,537	7,488	8,139	7,094	3,590	2,364	3,399	2,181	12,127	9,852	11,538	9,275
Discharge of Mortgage ...	849	618	838	607	435	259	428	254	1,284	877	1,266	861
Alterations & Additions ...	169	43	155	40	317	68	305	65	486	111	460	105
Other ...	73	32	70	32	41	26	34	23	114	58	104	55
Total ...	22,983	20,871	20,630	17,161	11,517	8,407	10,487	6,969	34,500	29,278	31,117	24,130

The average amount of loans approved for the erection or purchase of a home up to 30th September, 1941 was about £800 in the metropolitan societies and £750 in all societies. By 31st March, 1948, the averages had increased to £900 and £870 respectively.

#### WAR SERVICE HOMES.

Assistance towards the acquisition of a home is provided by the Commonwealth in terms of the War Service Homes Act, 1918-1947 for persons who were enlisted or appointed for active service outside Australia in the 1914-18 war or, prior to 3rd September, 1945, in any war which commenced on or after 3rd September, 1939. Persons eligible for assistance include members of the Australian Navy, Military or Air Forces and members of other British Forces who had resided in Australia before enlistment or appointment for war service; also certain members of the Mercantile Marine Service employed on seagoing ships during the 1914 and 1939 wars, if domiciled in Australia during such employment. Assistance may be granted to widows of eligible persons and, if dependent prior to war service, to widowed mothers of unmarried members.

The Act was administered by the War Service Homes Commission until June, 1947, when the Commission was reconstituted under the control of the Director-General of the Commonwealth Department of Works and Housing and executive duties of the Commissioner devolved upon the Director of War Service Homes.

The Director may acquire land and erect homes thereon or erect, complete or enlarge homes on land owned by the applicants, or sell homes on the rent-purchase system. He may make advances for the erection or purchase of homes or to discharge mortgages thereon.

The statutory limit on the cost to the Commission of a home erected or acquired was £950; it was raised to £1,250 in April, 1946, and further to £1,750 in June, 1947. The limit of advances was raised from £950 to £1,250 in 1946 and to £1,500 in 1947.

The number of war service homes provided in New South Wales to 30th June, 1940, was 12,317, viz., by construction or assistance in construction 6,630, by purchase 4,267 and by discharge of mortgage 1,420. Only 69 homes were provided, mostly by discharge of mortgage, during the next five years, 76 in 1945-46 and 437 in 1946-47. The total number as at 30th June, 1947, was 12,899, including 6,691 by construction, 4,611 by purchase and 1,597 by discharge of mortgage. In addition, building applications had been approved for 490 homes, of which 119 were under construction and contracts had been let for 109. Instalments amounting to £11,170,093 had been paid and arrears were £158,961. Loans in respect of 5,330 homes had been repaid at 30th June, 1947.

#### COMMUNITY ADVANCEMENT AND SETTLEMENT SOCIETIES.

The Co-operation Act, 1923-1947, provides, *inter alia*, for the formation of community advancement societies and community settlement societies. Community advancement societies may be formed to provide any community service or benefit, *e.g.*, to supply water, gas, and electricity, to establish factories, to purchase machinery for members, to buy land, purchase or erect dwellings for sale or rental to members, to maintain buildings for education, recreation, etc.

Community settlement societies may be formed for the purpose of acquiring land in order to settle or retain people thereon and providing any community service.

Up to 30th June, 1946, sixty-three community advancement societies had been registered under the Act, and there were forty-two societies in active operation at that date. Most of these societies were formed with the object of erecting and maintaining public halls or for establishing recreation or social clubs. Seven community settlement societies have been registered, but only one was on the register at 30th June, 1946.

#### PARKS, RECREATION RESERVES, AND COMMONS.

Under the Public Parks Act the Governor may appoint trustees of any lands proclaimed for the purposes of public recreation, convenience, health or enjoyment. The trustees are empowered to frame by-laws regarding the use of the land by the public and for the protection of shrubs, trees, etc. The largest is Kosciuszko State Park, comprising more than 1,250,000 acres set apart in 1944. It embraces Crown lands in the Kosciuszko highlands extending about 100 miles northward from the Victorian border to the Australian Capital Territory. The National Park (34,932 acres) and Kuring-gai Chase (38,263 acres) are situated to the south and north of Sydney respectively.

The public parks and recreation reserves which are not committed to special trustees are controlled by municipal and shire councils. All the towns of importance possess extensive parks and recreation reserves.

There are over 14,000 acres of public parks and reserves in metropolitan municipalities, including 626 acres in the city of Sydney.

The Zoological Gardens at Taronga Park, on the northern side of the Harbour, were opened in 1916. The area is about 50 acres. The natural formation has been retained as far as practicable with the object of displaying the animals in natural surroundings. An aquarium has been built within the gardens.

Surrounding many country towns there exist considerable areas of land reserved as commons, on which stock owned by the townsfolk may be depastured. The use of these lands is regulated by local authorities. Nominal fees are usually charged to defray the cost of supervision and maintenance. Many of these commons are reserved permanently, but a large number are only temporary.

#### PUBLIC ENTERTAINMENTS.

##### *Theatres and Public Halls, etc.*

Buildings in which public meetings (other than meetings for religious worship) or public entertainments are held must be licensed under the Theatres and Public Halls Act. A license may be refused if proper provision is not made for public safety, health and convenience, or if the site or building is unsuitable for the purpose of public meeting or entertainment. Plans of buildings intended to be used as theatres and public halls must be approved by the Chief Secretary before erection is begun.

Cinematograph films are subject to censorship before exhibition in New South Wales. The Commonwealth Customs authorities review the films imported from oversea countries. State officials review the films made in Australia, and may take action in terms of the Theatres and Public Halls Act in respect of imported films.

##### *Horse and Greyhound Racing.*

Horse racing is a popular form of sport in New South Wales. It is subject to general supervision in terms of the Gaming and Betting Act; race-meetings are not permitted except on licensed racecourses and a limitation is imposed on the number of days on which race meetings may be held.

Greyhound racing is conducted by non-proprietary associations on specially licensed racecourses and the number of such racecourses may not exceed two in the metropolitan area nor one in any country town.

Horse racing was conducted formerly by proprietary companies as well as by racing clubs. In 1943 the Sydney Turf Club was formed with authority to acquire six metropolitan courses and to conduct race meetings. Since 1st January, 1945, licenses have been issued only for non-proprietary race courses.

During the war period race meetings were limited, in general, to Saturdays and public holidays in terms of an Order issued by the Premier of New South Wales under National Security Regulations on 5th January, 1942. On the expiration of the National Security Act the restriction on racing days was continued under State legislation until 31st December, 1948, in respect of race courses within 75 miles of Sydney or 40 miles of Newcastle; a mid-week meeting at Randwick (Sydney) is permitted on two specified days each year.

Betting or wagering is prohibited in connection with any sports except horse, pony, trotting and greyhound races on licensed racecourses, and

coursing on grounds approved by the Chief Secretary. Racing clubs may be required to instal totalisators on their racecourses and to use them at every race meeting.

The following statement shows the amount of totalisator investments and of bookmaker's turnover (estimated on the basis of tax collected on the total amount of bets made):—

TABLE 769.—Totalisator Investments and Bookmakers' Turnover.

Year ended June.	Totalisator Investments.	Bookmakers' Turnover (approximate).	Year ended June.	Totalisator Investments.	Bookmakers' Turnover (approximate).
	£	£		£	£
1937 ...	1,370,379	11,554,300	1943 ...	2,377,102	14,772,600
1938 ...	1,471,292	17,312,100	1944 ...	4,663,710	28,503,000
1939 ...	1,731,436	21,378,800	1945 ...	5,802,788	36,492,800
1940 ...	1,908,066	19,533,400	1946 ...	7,482,819	51,594,400
1941 ...	2,222,545	19,774,800	1947 ...	7,224,274	55,380,800
1942 ...	1,961,947	16,473,800	1948 ...	8,543,920	65,739,200

A tax, 15 per cent. of gross revenue, has been levied since 1st January, 1938, on clubs which conduct greyhound racing in the metropolitan district. The tax amounted to £3,852 in the year 1943-44, to £6,882 in 1944-45, to £8,358 in 1945-46 and £15,426 in 1946-47.

Particulars relating to taxes in connection with racing are shown in the chapter relating to Public Finance.

#### TAXATION OF PUBLIC ENTERTAINMENTS.

##### *State Entertainments Tax.*

The State Government imposed a tax on entertainments from 1st January, 1930, to 30th September, 1942. Then the tax was suspended in consequence of arrangements between the Commonwealth and States for uniform entertainments tax levied by the Commonwealth throughout Australia. Information relating to the tax was published in earlier issues of the Year Book.

##### *Commonwealth Entertainments Tax.*

Entertainments tax was levied by the Commonwealth from January, 1917, to October, 1933, and reimposed at higher rates from 1st October, 1942.

The tax is payable on admissions for which the charge is 1s. or more. The tax is 3d. where the payment for admission is 1s., and it increases by 2d. for each additional 6d. or part thereof to 19d. where payment for admission is between 4s. 6d. and 5s., then it increases by 3d. per 6d. or part thereof. The rates of tax on admissions to entertainments in which all the performers are actually present and performing, *e.g.*, stage play, ballet, musical performance, lecture, circus, are taxed at rates approximately 25 per cent. less than the general rates.

A special scale of rates is applied in respect of separate charges of not less than 3d. for refreshments served at such entertainments as dances, card parties and skating, also for entertainments at amusement parks.

Particulars of taxable admissions and tax in respect of entertainments in New South Wales from 1st October, 1942, to 30th June, 1946, are shown below:—

TABLE 770.—Commonwealth Entertainments Tax—Admissions and Collections in New South Wales.

Entertainments Taxable—	Taxable Admissions.			Tax Paid.		
	1943-44.	1944-45.	1945-46.	1943-44.	1944-45.	1945-46.
	Thousands (000) omitted.			£	£	£
At lower rate—						
Theatres ... ..	1,881	1,834	1,554	81,441	85,016	73,630
Miscellaneous ... ..	367	539	621	10,212	15,361	21,074
Periodical Tickets ... ..	16	33	30	811	1,808	1,689
At higher rate—						
Pictures ... ..	56,951	62,825	61,505	1,402,927	1,558,308	1,540,608
Racing ... ..	2,368	2,544	3,164	168,013	184,479	237,125
Dancing, Skating ... ..	5,365	4,579	4,367	197,727	196,000	190,051
Sport ... ..	1,736	2,043	3,023	43,247	53,039	86,249
Miscellaneous ... ..	1,430	641	819	34,316	52,782	45,366
Periodical Tickets ... ..	35	111	152	4,358	10,267	14,714
Total ... ..	70,149	75,149	75,235	1,943,052	2,157,060	2,210,506

The tax paid on admissions to picture shows represented 69.7 per cent. of the total in 1945-46 as compared with 72.2 per cent. in the earlier years.

#### STATE LOTTERIES.

State lotteries are conducted in New South Wales, in terms of the State Lotteries Act, 1930. The Act is administered by a director, and the lotteries are conducted on the cash-prize system. From the proceeds of the sale of tickets in each lottery a sum is apportioned for prizes and the balance is payable to Consolidated Revenue. The first lottery was drawn on 20th August, 1931.

Up to 30th June, 1947, the number of lotteries filled was 1,521. Subscriptions to these amounted to £40,271,247, the prizes to £25,028,834, and the excess of subscriptions over prizes was £15,242,413. Administrative expenses and preliminary charges such as salaries, office equipment and alterations to buildings amounted to £956,708. Minor receipts were £2,221, and the net amount credited to Consolidated Revenue Fund was £14,287,926.

Particulars regarding the lotteries filled in each year to 30th June, 1947, are shown below:—

TABLE 771.—State Lotteries, 1931-32 to 1946-47.

Year ended June.	Lotteries Filled during each Year.				Administrative Expenses.
	Number.	Subscriptions.	Prizes Allotted.	Excess of Subscriptions over Prizes.	
		£	£	£	£
1932 ... ..	67	2,047,497	1,280,394	767,103	69,064
1933: ... ..	78.	2,100,000	1,315,710	784,290	62,126
1934 ... ..	70	1,837,500	1,141,025	696,475	55,341
1935 ... ..	68	1,785,000	1,108,400	676,600	50,497
1936 ... ..	73	1,916,250	1,189,900	726,350	51,162
1937 ... ..	78	2,047,500	1,271,510	775,990	53,329
1938 ... ..	85	2,231,250	1,385,500	845,750	53,592
1939 ... ..	91	2,388,750	1,483,310	905,440	55,674
1940 ... ..	87	2,283,750	1,418,100	865,650	55,647
1941 ... ..	84	2,205,000	1,369,205	835,795	52,044
1942 ... ..	82	2,152,500	1,336,605	815,895	53,912
1943 ... ..	95	2,493,750	1,548,500	945,250	52,125
1944 ... ..	121	3,176,250	1,972,320	1,203,930	64,246
1945 ... ..	135	3,543,750	2,200,505	1,343,245	67,492
1946 ... ..	146	3,832,500	2,379,800	1,452,700	72,989
1947 ... ..	161	4,230,000	2,628,050	1,601,950	87,468

#### REGULATION OF LIQUOR TRADE.

The sale of intoxicating liquor is subject to regulation by the State Government in terms of the Liquor Act of 1912 and subsequent amendments.

The Act was substantially amended in 1946, particularly the provisions relating to trading hours, registration of clubs, supply of liquor to restaurants and canteens and the standard of accommodation in hotels.

For purposes of administration the State is divided into 104 licensing districts, including the metropolitan district with which Liverpool, Ryde and Parramatta districts were amalgamated on 1st April, 1947.

A Licensing Court in each district is constituted by three magistrates for the control of licensed premises and the determination of applications for new licenses. This Bench of three magistrates also constitutes the Licenses Reduction Board, first appointed in 1920 to reduce the number of publicans' (and later wine) licenses. Provision is contained in the Act of 1946 for the reconstitution of the Court and Board, on a day to be proclaimed. The Court as reconstituted will consist of a District Court Judge and two other persons, each being a licensing magistrate in office immediately prior to the proclaimed date or a stipendiary magistrate or eligible for appointment as stipendiary magistrate.

#### *Liquor Licenses.*

The sale of intoxicating liquor in New South Wales except by persons holding a license is prohibited. There are several kinds of licenses, viz.,

publican's, Australian wine, club, packet, booth or stand, railway refreshment rooms, spirit merchants and brewers, also, since 1946; restaurant permits. These licenses, except the railway refreshment room licenses, are issued by the Licensing Court in various districts.

A publican's license authorises the licensee to sell liquor in the premises, i.e., hotel, specified in the license. A permit for the supply of liquor with meals between 6 p.m. (general closing hour) and 9 p.m. may be issued to the holder of a publican's license.

An Australian wine license authorises the holder to sell on specified premises wine, cider, or perry, the produce of fruit grown in Australia, in quantities not exceeding two gallons and not containing more than 35 per cent. of proof spirits. In granting an Australian wine license the licensing court may impose the condition that liquor shall not be consumed upon the premises.

A packet license authorises the master of a specified vessel to sell liquor to passengers during voyages. These licenses are not available on vessels plying between places within Sydney Harbour.

A spirit merchant's license authorises the sale of liquor on specified premises in quantities of not less than two gallons of either (a) malted liquor or (b) liquor other than malted.

A booth or stand license is issued to a holder of a publican's license in the same licensing district for the sale of liquor on a particular day or days at sports or other lawful place of amusement or at an agricultural or industrial show. In terms of the Act of 1946 a booth or stand license may be issued also to a non-proprietary association controlling or owning the land on which the sporting event or show or other function for public amusement is to be held.

A brewer's license authorises the holder to carry on the trade of a brewer and to sell the liquor he is authorised to make in quantities of not less than two gallons of the same kind; a separate license is required for each place of manufacture or sale. A brewer who is also a spirit merchant is required to take out a license for each class of business.

A club is licensed for the sale of liquor by the issue of a certificate of registration which authorises the secretary to sell liquor on the club premises under prescribed conditions. Permits may be granted for the supply of liquor with meals in registered clubs between 6 p.m. and 9 p.m. The number of registered clubs in New South Wales was limited to 85 (the number existing in March, 1906) until statutory provision for increased registrations was brought into operation on 1st April, 1947. Apart from returned servicemen's clubs, the maximum number of clubs which may be registered in the metropolitan licensing district (including Liverpool, Parramatta and Ryde) is one club for every four hotels, less twenty, and in Wollongong licensing district, the number as at 1st April, 1947, plus three. In other licensing districts the maximum is one club for every six hotels or one club where there are less than six hotels—but not less than the number of clubs existing on 1st April, 1947. In addition, returned servicemen's clubs to a maximum number of twenty in the metropolitan district and one in each extra-metropolitan electoral district may be registered provided that application for registration was made before 1st October, 1947. The maximum number of clubs which may be registered in the State under the new provisions of the law is 414. A club is not

eligible for registration unless it is a non-proprietary club with at least 60 members, if situated within a radius of 15 miles of the General Post Office, Sydney, or 30 members if in any other locality.

Licenses for the sale of liquor and permits for the sale of Australian wines in railway refreshment rooms are issued by executive authority. In terms of the Liquor (Amendment) Act, 1946, the Commissioner for Railways is authorised to supply liquor to passengers to be consumed with meals on trains of the State railways.

Permits in respect of restaurants, available for the first time in 1946, may be granted where the accommodation and equipment of the restaurant are of satisfactory standard. The holder of a permit is authorised to supply light wines of Australian production and malted liquors with meals between noon and 2.30 p.m. and between 6 p.m. and 8.30 p.m.

Permits for the sale of liquor in canteens at construction camps or works of a public nature may be issued by the Minister upon recommendation by the licensing court, and subject to conditions determined by the court.

By provisions of the Liquor Amendment Act, 1946, councils of local government areas are authorised to conduct community hotels. The council of a municipality or shire may establish a community hotel by purchase of existing licensed premises, or, if such purchase cannot be made on reasonable terms, it may present a petition to the Governor and apply for a new license in respect of premises owned by the council. The profits of a community hotel must be applied towards a public purpose, e.g., hospital, library, facilities for recreation, health or welfare.

Conditions attached to the removal of licenses from one district to another were amended in 1946 with a view to a more equitable distribution of licenses throughout the State. The Licensing Court may grant an application for removal of a publican's, Australian wine or spirit merchant's license from one place to another in New South Wales, except that a license may not be removed from any other district into the Metropolitan or Newcastle district.

The Court may not make an order of removal unless satisfied that it is in the interests of the public in the neighbourhood of the proposed new site and not detrimental to public interests in the area from which the license is to be removed. Moreover, the Court must refuse an order of removal of a publican's license in the metropolitan or Newcastle district to a new site in the same district if it is satisfied that public interest would be better served by removal to a site in some other part of the district.

#### *Number of Liquor Licenses.*

The number of publicans' licenses was 2,539 in 1920 when the Licenses Reduction Board was appointed, and 2,028 at the end of 1946. During the interval 60 new licenses were granted, 498 were terminated by order of, or by surrender to, the Board, and 73 by expiration, etc. The number of Australian wine licenses was 441 in January, 1923, and 347 at the end of 1946. In this period only 3 new licenses were granted; 80 were terminated by order or surrender to the Board, and 17 by expiration of license, etc.

When hotel licenses are terminated by order or acceptance of surrender by the Licenses Reduction Board the licensees and owners and lessees of



the premises are entitled to compensation, as assessed by the Board. Compensation is paid from a fund formed by annual levy paid by licensees and owners between 1920 and the end of 1926 when the levy was discontinued. In the case of wine licenses only the licensees are entitled to compensation.

Receipts of the Compensation Fund (including interest earnings to 31st December, 1927) amounted to £1,612,783. Payments to 31st December, 1946, were compensation £891,970; administration £222,635 and transfer to Consolidated Revenue Fund £250,000. The net balance of the fund at 31st December, 1946, was £248,178.

Compensation awarded in respect of 497 publican's licenses amounted to £828,140 distributed as follows:—Licensees £282,921 (including £60 not collected by licensee), and owners and lessees of premises £545,219. Compensation had not been determined in respect of 2 publicans' licenses, and one of these was still in operation at 31st December, 1946. Compensation amounting to £63,890 was awarded to 78 holders of Australian wine licenses, and in two cases no compensation was awarded.

The number of licenses for the sale of intoxicating liquor issued in 1939, 1941 and later years is shown below:—

TABLE 772.—Liquor Licenses Issued, 1939 to 1946.

Licenses.	1939.	1941.	1942.	1943.	1944.	1945.	1946.
Publicans' ... ..	2,038	2,035	2,031	2,028	2,028	2,028	2,028
Club ... ..	84	85	85	85	85	85	85
Railway Refreshment—							
General Liquor ... ..	43	43	43	43	43	43	43
Wine ... ..	11	11	11	12	12	12	12
Booth or Stand ... ..	2,255	2,070	1,093	1,179	1,910	2,156	2,504
Packet ... ..	4	5	5	1	1	1	1
Australian Wine ... ..	348	348	348	347	347	347	347
Spirit Merchants' ... ..	237	234	232	230	230	234	295
Brewers' ... ..	6	6	6	6	6	6	6
Permits to supply liquor with Meals in—							
Hotels and Clubs (6 p.m. to 9 p.m.) ... ..	249	225	161	129	150	135	186
Restaurants ... ..	...	...	...	...	...	...	25

There was little change in the number of licenses current in the years 1939 to 1945 (apart from temporary licenses for booth or stand). By order under the National Security Act issued on 28th April, 1945, application for a new license (other than booth or stand license) was prohibited and action was stayed in respect of applications pending at that date. When the order was repealed on 13th September, 1946, many applications for spirit merchants' licenses were lodged. Of these 61 were granted, 133 refused or withdrawn and 114 were pending at the end of the year.

*Purchase of Liquor Licenses and License Fees.*

The annual fees payable for new licenses in respect of hotels, packets and Australian wine are assessed by the Licensing Court, the maximum fees being £500, £20 and £50 respectively. The fee for a new restaurant permit is £30 and for a new spirit merchant's license £30 in the metropolitan district, and £20 elsewhere. For registration of a club the maximum fee for a new certificate is £500, but the fee must not exceed £1 per member as at date of application.

For renewals of these licenses the annual fees are assessed by the Licenses Reduction Board as proportionate to the amount spent by the licensees in the purchase of liquor during the preceding calendar year, viz., publicans, clubs and restaurants 5 per cent.; spirit merchants 2 per cent., but not less than the fee for a new license; packet and wine licenses 2 per cent. Publicans and spirit merchants do not pay on the liquor sold by them to persons licensed to sell liquor. The owner of hotel premises is liable for two-fifths of the license fee, but if his share exceeds one-third of the rent he may obtain a refund of part or the whole of the excess as determined by the Board.

Brewers pay £50 per annum for a license in the metropolitan district and £25 in other districts. For booth and stand licenses, which are temporary permits, the fee is £2 per day. For permits to supply liquor with meals in hotels and clubs between 6 p.m. to 9 p.m., the fee is assessed on a sliding scale according to the amount of fee for license or certificate of registration.

The fees for licenses in respect of railway refreshment rooms are assessed at the same rate as those for publicans' licenses, but the Railway Commissioner does not pay fees for refreshment rooms for which Australian wine licenses only are issued.

The following statement shows the amount expended by licensees in the purchase of liquor in each year from 1923:—

TABLE 773.—Purchases of Liquor by Licensees, 1923 to 1947.

Year.	Purchases by Licensees.	Year.	Purchases by Licensees.	Year.	Purchases by Licensees.	Year.	Purchases by Licensees.
	£		£		£		£
1923	8,372,124	1930	7,717,587	1937	8,531,795	1944	14,580,724
1924	8,782,060	1931	6,169,172	1938	9,359,378	1945	15,448,641
1925	9,217,493	1932	6,064,659	1939	9,793,965	1946	21,060,306
1926	9,736,678	1933	6,123,185	1940	11,034,142	1947	23,956,649
1927	10,111,795	1934	6,701,668	1941	12,384,714		
1928	10,260,317	1935	7,311,350	1942	13,210,413		
1929	10,410,456	1936	7,802,495	1943	14,569,529		

The amount expended in each calendar year, as shown above, is the basis of the fees for the renewal of various classes of licenses as from

1st July of the following year. The amount of fees assessed in recent years is shown below:—

TABLE 774.—Liquor Licenses—Fees, 1939 to 1947.

License.	1939.	1941.	1943.	1944.	1945.	1946.	1947.
	£	£	£	£	£	£	£
<b>Fees assessed on purchases—</b>							
Publicans'... ..	421,647	497,911	585,776	637,744	638,055	673,635	915,878
Club ... ..	4,000	4,981	5,059	5,675	5,817	6,955	25,646
Rlwy. Refreshment	1,674	2,413	3,556	3,813	3,889	4,013	3,848
Packet ... ..	17	17	3	3	5	5	2
Australian Wine ...	4,868	5,061	7,997	8,823	9,756	9,678	13,183
Spirit Merchants'	10,473	11,914	16,614	21,470	20,532	22,322	37,005
<b>Other fees—</b>							
Brewers' ... ..	250	250	250	250	250	250	250
Booth or Stand ...	5,326	4,642	2,412	3,892	4,550	5,395	6,914
Permits to supply liquor with meals	1,288	1,297	922	804	849	1,750*	3,605*

\* Includes restaurant permits £630 in 1946 and £1,766 in 1947.

#### *Licensed Premises—Trading Hours.*

Licensees are not permitted to keep licensed premises open for the sale of liquor on any Sunday, Good Friday or Christmas Day or other day proclaimed by the Governor or upon the day of any general election of members of the Legislative Assembly of New South Wales or Commonwealth Parliament.

The hours of liquor trading in hotels were prescribed by the Liquor (or the former Licensing) Act, as follows:—6 a.m. to 11 p.m. from 1881 to 1916; 6 a.m. to 6 p.m. from 1916 to 1946, and 10 a.m. to 6 p.m. since 1946. The hours prescribed for the supply of liquor with meals in hotels and clubs after 6 p.m. and in restaurants have been stated earlier in this chapter.

Restrictions on hours, in terms of the Liquor Act, do not apply to the sale of liquor to *bona fide* travellers or inmates of hotels and registered clubs, but liquor may not be sold at the bar of licensed premises except during prescribed hours. Special restrictions were imposed on liquor trading hours during the war periods.

The alteration in the closing hour from 11 p.m. to 6 p.m. in 1916 was made after a referendum on the question of the closing hour for licensed premises and registered clubs during the war; the change in the opening hour from 6 a.m. to 10 a.m. in 1946 was prescribed by the Liquor Amendment Act passed in that year.

At the referendum on the question of the closing hour taken on 10th June, 1916, votes were recorded by only 54 per cent. of the electors enrolled. A referendum on the closing hour was taken also on 15th February, 1947; voting was compulsory and only a small proportion of the electors failed to vote. At both referendums the majority of votes was cast

in favour of six o'clock closing. Particulars of the formal votes recorded are shown below; informal votes numbered 22,208 in 1916 and 15,183 in 1947:—

TABLE 775.—Hotels and Registered Clubs, Closing Hour—Referendums 1916 and 1947.

Closing Hour.	Number of Votes Recorded (exc. informal).		Proportion of Total Votes.	
	1916.	1947.	1916.	1947.
6 o'clock p.m. ...	347,494	1,051,620	per cent. 62.4	per cent. 62.5
7 " " ...	4,830	...	.9	...
8 " " ...	21,134	...	3.8	...
9 " " ...	178,842	26,954	32.1	1.6
10 " " ...	1,405	604,833	.3	35.9
11 " " ...	3,193	...	.5	...
Total ...	556,898	1,683,407	100	100

At the referendum in 1947, the choice was restricted to 6 p.m., 9 p.m., or 10 p.m. If either of the later hours had been chosen, the premises would have been closed between 6.30 p.m. and 7.30 p.m. (except for supply of liquor with meals under permit).

#### *Consumption of Intoxicants.*

The information in Table 776 was obtained from the Licenses Reduction Board to show the quantity of spirits, wines and beers purchased by holders of liquor licenses for retailing to the public, together with the quantity sold direct to the public by wholesale wine and spirit merchants.

TABLE 776.—Intoxicants—Consumption and Expenditure by Public, 1928 to 1947.

Year.	Quantity Purchased by Licensees.			Estimated Expenditure by the Public on Intoxicants.
	Beer.	Wine.	Spirits.	
	Gallons.	Gallons.	Gallons.*	£
1928	28,993,000	1,496,107	1,260,854	17,440,000
1932	18,042,000	1,271,318	610,484	10,380,000
1933	18,925,000	1,473,094	617,468	10,500,000
1934	21,573,000	1,559,573	716,816	11,490,000
1935	23,764,000	1,619,248	761,406	12,530,000
1936	26,218,000	1,641,827	785,912	13,320,000
1937	28,881,000	1,663,971	824,110	14,520,000
1938	34,249,000	1,622,560	848,099	15,870,000
1939	35,379,000	1,640,351	883,618	16,620,000
1940	37,904,000	1,765,267	883,160	18,230,000
1941	38,073,000	2,056,367	820,729	20,970,000
1942	35,904,000	2,581,627	731,289	22,230,000
1943	32,948,000	2,503,849	725,976	24,400,000
1944	33,056,000	2,463,897	713,810	24,500,000
1945	33,542,000	2,360,833	869,483	26,000,000
1946	43,532,000	2,815,479	1,551,274	34,760,000
1947	52,027,000	3,582,081	1,229,536	38,960,000

\* Liquid, not proof, gallons.

The figures in the table may be taken as the consumption of intoxicating liquor by the public. It is difficult to estimate the expenditure on intoxicating liquor because liquor is sold at varying prices not only in different localities, but in hotels in the same district and even in the different bars of the same hotel. The figures shown in the table are published as reasonably accurate; expenditure in military canteens, etc., which were not supplied by licensees, is not included.

Consumption of liquor in New South Wales in 1938 as indicated by purchases of licensees was about 34,250,000 gallons of beer, 1,620,000 gallons of wine and 848,000 (liquid) gallons of spirits. In the early years of the war period, annual consumption of beer rose to 38,000,000 gallons and wine to 2,056,000 gallons; the quantity of spirit declined to 820,700 gallons. In March, 1942 the supply of liquor in Australia became subject to control under National Security Regulations and annual consumption of beer declined to 33,000,000 gallons and spirits to 714,000 gallons in 1944. Consumption of wine, which reached the wartime peak 2,582,000 gallons in 1942, was somewhat below this level in the next three years. Liquor supplied direct to canteens for Australian and visiting Forces during the war period is not included in these figures.

War-time control of spirits was revoked on 1st November, 1946, and control of beer on 26th March, 1946. Consumption in military canteens dwindled in consequence of the departure of visiting Forces and demobilisation of Australian troops. Under these circumstances, increased supplies were available for civilian consumption and there was marked increase in 1946. Consumption of beer increased to 43,532,000 gallons, the largest quantity on record, and the quantity of spirits, which had increased in 1945 was 1,551,300 gallons, the highest since 1914-15. In wine, also, there was substantial increase.

The increase in the estimated expenditure by the public on intoxicants between 1939 and 1943 was due largely to increased taxation. For instance, excise duty on beer was raised from 1s. 9d. per gallon to 2s. in September, 1939, to 2s. 9d. in November, 1940, to 3s. in December, 1941, and to 4s. 7d. in September, 1942. Customs and excise duties on spirits also were increased during this period by as much as 28s. 6d. per proof gallon. The duties have not been varied since September, 1942.

Practically the whole of the beer and the wine and a large proportion of the spirits consumed in the State are of Australian origin. Information as to the operations of breweries in New South Wales is published in the chapter "Factories" of this Year Book.

### *Drunkenness.*

Persons apprehended by the police for drunkenness in public places may be charged in the Courts of Petty Sessions. It is the practice to release such persons before trial if they deposit as bail an amount equal to the usual penalty imposed. If they do not appear for trial the deposits are forfeited, and further action is not taken.

The number of convictions for drunkenness (including cases of forfeiture of bail) was fairly constant at less than 35,000 in the years 1940 to 1944 inclusive. A steep rise occurred in later years and the number in 1947 was higher by 32,782 than in 1944.

The following statement shows particulars of the cases of drunkenness and convictions in various years since 1929; the figures for the war years relate to civilians.

TABLE 777.—Drunkenness—Cases and Convictions, 1929 to 1947.

Particulars.	1929.	1932.	1939.	1943.	1944.	1945.	1946.	1947.
Persons charged*—								
Males ... ..	31,321	19,682	30,128	31,936	31,427	39,882	57,936	63,449
Females ... ..	2,498	2,133	2,344	2,993	3,149	3,700	4,275	4,076
Total ... ..	33,819	21,815	32,472	34,929	34,576	43,582	62,211	67,525
Discharged, Charge With-								
drawn, etc. ... ..	683	305	67	23	14	21	91	201
Convictions—								
After Trial ... ..	21,099	15,721	17,293	10,587	9,090	9,366	11,666	12,372
Bail Forfeited... ..	12,037	5,789	15,112	24,319	25,472	34,195	50,454	54,952
Total Convictions Males	30,089	19,415	30,066	31,917	31,414	39,862	57,854	63,250
"      "      Females	2,447	2,095	2,339	2,989	3,148	3,699	4,266	4,068
Total ... ..	33,136	21,510	32,405	34,906	34,562	43,561	62,120	67,324
Per 1,000 of Population—								
Charges ... ..	13.51	8.46	11.81	12.29	12.04	15.03	21.27	22.02
Convictions ... ..	13.24	8.34	11.79	12.29	12.04	15.03	21.24	22.55

\* Counted each time charged.

In addition to cases of drunkenness to which the foregoing table relates, convictions on the charge of driving a motor vehicle while under the influence of intoxicating liquor or drug numbered 486 in 1944, 658 in 1945, 1,394 in 1946 and 1,368 in 1947.

#### *Treatment of Inebriates.*

An inebriate convicted of an offence of which drunkenness is a factor, or, in certain cases, a contributing cause, may be required to enter into recognisances for a period of not less than twelve months and during this period he must report periodically to the police; or he may be placed in a State institution.

For the care and treatment of inebriates other than those convicted of an offence, State institutions may be established under the control of the Inspector-General of Insane. Judges, magistrates and the Master-in-Lunacy may order that an inebriate be bound over to abstain, or that he be placed in a State or licensed institution or under the care of an attendant controlled by the Master-in-Lunacy, or of a guardian, for a period not exceeding twelve months. Provision is made also to enable an inebriate to enter voluntarily into recognisances to abstain.

Inebriates are detained in some of the State Mental Hospitals, and the number under the supervision of the Inspector-General of Mental Hospitals at 30th June, 1946, was 96, viz., 73 men and 23 women. The number admitted for the first time was 114, including 20 women, in the year 1945-46.

## LICENSES FOR VARIOUS OCCUPATIONS.

Partly as a means of raising revenue and partly as a means of ensuring a certain amount of supervision over persons who follow callings which bring them into contact with the general public or are carried on under special conditions, licenses must be obtained by auctioneers, stock and station agents, real estate agents, pawn-brokers, hawkers, pedlars, collectors, second-hand dealers, fishermen, and persons who sell tobacco, conduct billiard and bagatelle tables or engage in Sunday trading.

No person may purchase, carry or have in his possession a pistol unless he holds a license under the Pistol Act, 1927-1946. A separate license is required for each pistol. Licenses may not be issued to persons under 18 years of age.

For pawnbrokers' licenses an annual fee of £10 is payable. The hours for receiving pledges are limited, with certain exceptions, to those between 8 a.m. and 6 p.m., but a restriction is not placed on the rate of interest charged.

*Licensing of Auctioneers and Agents.*

Auctioneers, stock and station agents and real estate agents must be licensed under the Auctioneers, Stock and Station and Real Estate Agents Act, 1941-1946. Registration is required also in the case of real estate salesmen employed by real estate agents or by real estate dealers (persons not licensed as real estate agents whose sole or principal business is the selling, as owner, of land in allotments).

Auctioneers' licenses are classified as (1) general licenses available for all parts of New South Wales (annual fee £15), (2) country licenses for all districts outside the counties of Cumberland and Northumberland (fee £5 annually), (3) district licenses for the police district outside the Metropolitan area for which the license is taken out (fee £2 annually) and (4) primary products licenses for the market in the metropolitan police district which is specified in the license. In the metropolitan district an auctioneer must take out a general license unless he has a primary products license and acts as auctioneer only for selling firewood, coal, coke, fish or a product within the meaning of the Primary Products Act.

An auctioneers' license may not be granted to a licensed pawnbroker. Provision has been made for reciprocity in granting general licenses to auctioneers resident in reciprocating States of Australia and general, country and district licenses to those resident in the Australian Capital Territory.

The fee for a stock and station or real estate agents' license is £1. A corporation carrying on business as auctioneer, stock and station agent or real estate agent must take out a license on its own behalf (fee £5) as well as a license for each employee in charge of an office or branch.

The licenses must be renewed annually. Upon the grant of each application for a license or renewal, the licensee pays, in addition to the license fee, a fee not exceeding £1 which is placed in a special account for expenses of administration.

Licensees are required to contribute also to a fidelity guarantee fund established under the Act to reimburse persons who suffer loss by reason of theft or fraudulent misapplication of their property by a licensee. The maximum reimbursement payable from the fund was increased from £500 to £2,000, as from 1st July, 1946.

Particulars regarding licenses issued in each year are shown below:—

TABLE 778.—Auctioneers, Stock and Station and Real Estate Agents  
Licenses Issued.

Particulars.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
	No.	No.	No.	No.	No.
Licenses issued—					
Auctioneers—					
General ... ..	169	177	196	232	47
Country ... ..	181	146	185	214	260
District ... ..	830	849	898	1,060	1,222
Primary Products ... ..	25	20	17	15	20
Total, Auctioneers' Licenses ...	1,155	1,192	1,296	1,521	1,549
Stock and Station Agents ... ..	1,157	1,217	1,305	1,575	1,798
Real Estate Agents ... ..	1,993	2,017	2,120	2,402	2,599
Corporations ... ..	139	134	139	139	156
Individual Licensees (including employees of corporations) ... ..	2,681	2,716	2,729	3,158	3,731
Real Estate Salesmen—Certificates of registration issued... ..	109	86	88	99	119
Fidelity Guarantee Fund—	£	£	£	£	£
Contributions during year ... ..	7,479	7,237	2,379	3,246	4,251
Balance at 30th June ... ..	17,109	24,230	26,708	29,738	32,143

Business agents who deal with or negotiate the sale or purchase of various classes of businesses are required to take out a license under the Business Agents Act, 1935-1941. The agents are required to provide a fidelity bond in respect of trust moneys received by them in the course of business.

#### STATUS OF WOMEN.

In New South Wales women have the right to exercise the franchise and sex does not disqualify any person from acting as member of the Legislative Assembly, as member of a council of any shire or municipality, as judge, magistrate, barrister, solicitor, or conveyancer, or as member of the Legislative Council. Many women have been appointed justices of the peace, and some have been admitted to the practice of the legal profession. They are eligible for all degrees at the University of Sydney, but are not usually ordained as ministers of religion. By the Jury (Amendment) Act, 1947, provision is made to enable women to qualify for service on juries in the courts of New South Wales; enrolment of a woman as juror is voluntary.

Nearly 22 per cent. of the members of registered trade unions of employees are women, though there are few unions composed entirely of women. The employment of women in factories and shops is regulated by the Factories and Shops Act.

Rates of wages payable to women in industry are determined under the industrial arbitration systems described elsewhere in this Year Book. Matters which may be determined by the industrial tribunals include claims that the same wage be paid to men and women performing the same work, or producing the same return of profit or value to their employer. The basic wage for women is generally about 54 per cent. of the rate for men and margins for skill, etc., added to the basic rate, are usually the same for men and women doing the same class of work.

Special arrangements made for the regulation of wages and other conditions of employment of women in war-time industries; rates of wages awarded to women ranged from 75 per cent. to 100 per cent. of the rates payable to men employed in similar work.



A legal age of marriage has not been defined; the average age at which women marry is about 24 years. The consent of a parent or guardian or, in the absence of such consent, of a court or magistrate is necessary to validate the marriage of minors. The wife of a British subject is deemed to be a British subject throughout Australia. A woman who was a British subject resident in Australia at the time of her marriage to an alien may, while in Australia, retain her British nationality.

Under the Married Women's Property Act, 1901, a married woman is capable of holding, acquiring, or disposing of any real or personal property as her separate property in the same manner as if she were a *femme sole*. Her property is not liable for her husband's debts, and her earnings in any occupation apart from her husband's are her own. A wife, however, has no legal share of her husband's income, nor in any property acquired by their joint efforts after marriage, but the husband is liable for all necessary expenses of his wife and children. In matters relating to the guardianship of children, the mother has similar powers to those possessed by the father.

## RELIGION.

In New South Wales there is no established church, and freedom of worship is accorded to all religious denominations. A classification of the population according to religion, as recorded at the censuses of 1933 and 1947, is shown below:—

TABLE 779.—Religion of the Population—N.S.W.—Census, 1933 and 1947.

Religion.	Number of Persons.		Proportion Per Cent.	
	1933.	1947.	1933.	1947.
Christian—				
Church of England ...	1,143,493	1,293,964	49·63	48·78
Catholic, Roman (a) ...	489,163	268,496	}	25·52
Catholic (a) ...	66,943	408,497		
Presbyterian ...	257,522	262,166	11·18	9·88
Methodist ...	203,042	246,876	8·81	9·31
Baptist ...	29,981	34,935	1·30	1·32
Congregational ...	20,274	19,331	·88	·73
Salvation Army ...	9,610	10,871	·42	·41
Church of Christ ...	8,658	10,269	·38	·39
Other Christian ...	54,203	66,763	2·35	2·52
Total Christian ...	2,282,889	2,622,168	99·09	98·86
Non-Christian—				
Hebrew ...	10,305	13,194	·45	·50
Other ...	1,823	1,409	·08	·05
Indefinite, No Religion ...	8,796	15,537	·38	·59
No reply ...	297,034	332,530	...	...
Total Population ...	2,600,847	2,984,838	100	100

(a) So described on individual Census schedules.

When the census is taken in Australia there is no legal obligation to answer the question as to religion. The number of persons who did not state their religion was 297,034 or 12·4 per cent. in 1933 and 332,530 or 11·1 per cent. in 1947.

## EDUCATION.

### SYSTEM OF EDUCATION IN NEW SOUTH WALES.

In New South Wales there is a system of education controlled by the State which embraces primary, secondary and technical education, and there are numerous private educational institutions, of which the majority are conducted under the auspices of the religious denominations. The University of Sydney is maintained partly by Government endowment and grants and partly by students' fees and moneys derived from private sources.

The Public Instruction Act of 1880, with amendments, is the statutory basis of the State system. This system aims at making education secular, free and compulsory, each of these principles being enjoined by statute. General religious instruction is given by teachers, and special religious instruction for limited periods, with the consent of parents, by visiting religious teachers. Education in public primary and secondary schools is free.

Attendance at school is compulsory for children between the ages of 6 and 15 years. The statutory period was extended gradually between 1940 and 1943; formerly it was from 7 to 14 years.

Private schools must be certified as efficient for the education of children of statutory school age and, with few exceptions, are subject to State inspection.

The course in the primary schools supplies education of a general character in such subjects as English, mathematics, nature knowledge, civics and morals, art and manual work. Beyond the primary stage there are various types of courses in secondary education.

The full secondary course extends over five years, with the intermediate certificate examination at the end of the third year and the leaving certificate examination at the end of the fifth year. Certain subjects, *e.g.*, English, are regarded as basic, and other subjects may be selected by the pupil; these include foreign languages, science, art, home science (for girls) and technical and commercial subjects.

On completing a secondary course, pupils may continue their training at technical or business colleges. Those who have completed the full course may matriculate at the University.

Courses in agricultural science and practice and allied subjects are given at district rural schools, agricultural high schools and certain other schools. Advanced training in agriculture, dairying, etc., is provided for farmers and students at the Hawkesbury Agricultural College and at experiment farms in various districts administered by the Department of Agriculture. The final stages are reached at the University, where there are degree courses in agriculture and veterinary science.

Afforestation work is done by schools where areas are reserved for the purpose of enabling the pupils to study scientific forestry and silviculture.

Educational and vocational guidance services are provided in public schools. In this work School Counsellors in various districts and Careers Advisers in secondary schools co-operate with the Commonwealth employment offices and the youth welfare section of the State Department of Labour and Industry and Social Welfare.

A school medical service is maintained by the State for the benefit of children attending both public and private schools, as described in the chapter "Social Condition" of this Year Book.

#### THE AUSTRALIAN EDUCATION COUNCIL.

The Australian Education Council is composed of the Ministers of Education of the various Australian States and has power to co-opt the services of other Ministers if necessary.

The Council is concerned with such matters as the development of education in Australia in co-ordination with employment and social welfare, and the organisation of technical education with due regard to the requirements and absorptive capacity of industry.

There is associated with the Council a Standing Committee on Education composed of the Permanent Heads of the State Departments of Education and the Officers-in-charge of Technical Education. The functions of the Committee are to report upon matters referred to it by the Council, to act as advisory body to the Commonwealth and State Governments and to co-operate with the Council for Scientific and Industrial Research and other similar bodies in research into the requirements of industry.

#### COMMONWEALTH OFFICE OF EDUCATION.

The Commonwealth Office of Education was established under the Commonwealth Education Act in 1945. The Office is administered by a Director, and its principal function is to advise the Minister in regard to education and financial assistance to the States and other authorities for educational purposes. It is required also to maintain liaison with the States and other countries, and to undertake educational research.

The Director of the Commonwealth Office of Education (as Chairman) and three other members constitute the Universities Commission. Its functions include the provision of financial assistance to students at universities and similar institutions, and the administration of university-type training under the Commonwealth Reconstruction Training Scheme. Further details of the Commission's activities are given on pages 902 and 943.

#### COMMONWEALTH RECONSTRUCTION TRAINING SCHEME.

The Commonwealth Reconstruction Training Scheme came into operation in March, 1944, and was ratified by the Re-establishment and Employment Act, 1945. The object of the scheme is to provide training for ex-service men and women in order to re-establish them in civilian occupations.

Applications for full-time training may be made by service personnel who have served at least six months and have been honourably discharged. Applicants are selected subject to certain conditions designed to ensure

that they are suitable for the type of training applied for and that there are reasonable prospects for the profitable pursuit of the calling. Widows of servicemen whose death was due to war service are eligible for training.

There is a vocational guidance service with provision for psychological tests, counselling and welfare work. Training is provided at governmental and private institutions as follows: (a) university-type (professional); (b) technical-type (professional or vocational); and (c) rural training.

Professional training follows normal lines at a university or similar institution. Vocational training includes all types of trade training usually given at technical colleges or schools.

Rural training is provided by one of the following courses according to the circumstances in each case:—

- (a) Practical training on an approved farm, for a period up to two years.
- (b) An intensive course in farm management of about eight weeks' duration;
- (c) Training at technical institutions for such vocations as wool classing and meat inspection; or
- (d) Courses at agricultural colleges.

In New South Wales the eight weeks intensive course is provided at Wagga Experimental Farm, and a diploma course at the Hawkesbury Agricultural College. The students receiving full-time rural training in New South Wales numbered 121 in December, 1946.

For full-time trainees tuition and examination fees are paid; also allowances of £10 per annum for books and £20 per annum for tools and instruments. Living allowances are paid during training; the rates in December, 1946, ranged from £3 5s. per week for a man without dependants or a woman maintaining herself, and £2 10s. for a woman living with parents. Dependants' allowances are paid to both men and women and additional allowances to trainees living away from home. Living allowances in the fourth and subsequent years of a professional course (other than allowances for dependants or for living away from home) are a loan repayable by the trainee.

For part-time training a maximum allowance of £60 may be granted provided that the training will improve the applicant's occupational status. This is given, as far as possible, through universities and governmental institutions. Refresher courses are provided on a full-time basis where necessary.

The scheme as a whole is administered by executive committees within the Ministry of Post-war Reconstruction. The central body, viz., the Commonwealth Reconstruction Training Committee, is assisted by regional committees in the capital cities. Associated with the regional committees are professional, industrial and rural sub-committees of employee and employer representatives in the particular calling, and a representative of the training authority concerned. The functions of the sub-committees are mainly advisory.

The professional training scheme is administered by the Universities Commission in conjunction with the Department of Post-war Reconstruction, and the technical training scheme by the Industrial Training Division of the Commonwealth Department of Labour and National Service.

At the end of 1946 there were 31,321 persons in training under the scheme in New South Wales, viz.: 9,146 full-time trainees (3,822 university-type, 5,203 technical-type and 121 rural); 22,175 part-time (1,509 university-type and 20,666 technical-type). In addition, there were 3,001 trainees in subsidised employment including some receiving part-time technical training.

Further details are given on pages 934 and 943 of this Chapter.

#### ADMINISTRATION OF THE PUBLIC SCHOOL SYSTEM.

The system of education controlled by the State is administered by a responsible Minister of the Crown, through a permanent Director-General of Education, assisted by the Board of Secondary School Studies.

The public school teachers are for the most part full-time employees, and are classified in the Educational Division of the Public Service of New South Wales. The State is divided into school districts and an inspector supervises the schools and teachers in each district. In 1947 there were thirteen districts in the metropolitan area and thirty-five elsewhere.

##### *Board of Secondary School Studies.*

The Board of Secondary School Studies advises the Minister for Education on secondary education and determines the courses of study and examinations for secondary schools. Special committees are appointed by the Board to advise regarding the course of study in individual subjects.

The Board consists of five representatives of the University; five representatives of the Department of Education, including the Director-General of Education (as Chairman), the Chief Inspector of Schools (Deputy-Chairman) and the Director of Technical Education; a principal teacher of secondary schools (other than Roman Catholic schools) registered under the Bursary Endowment Act; a representative of Roman Catholic schools similarly registered; and a headmaster and a headmistress of the public secondary schools.

##### *Parents and Citizens' Associations.*

Parents and citizens' associations and kindred bodies have been organised in connection with public schools, with the object of promoting the interests of local schools and the welfare of the pupils and providing school equipment. The associations do not exercise authority over the staff or the management of the school.

District councils, composed of two representatives of each parents and citizens' association within the district, may be formed in proclaimed areas. They advise the Minister on certain school matters, and assist in raising funds for the establishment of scholarships in public schools and the purchase of special equipment, and in the founding of central libraries, etc.

#### SCHOOLS IN AUSTRALIAN CAPITAL TERRITORY.

The particulars relating to public and private schools in this chapter are inclusive of the schools in the Australian Capital Territory.

By arrangement with the Commonwealth Government, the New South Wales Department of Education conducts the public schools in the Capital Territory. Expenditure on the schools is recouped by the Commonwealth.

In 1946 there were 11 public schools (including the Canberra High School and the Canberra Nursery School, but not the Canberra Technical College) with 86 teachers and an effective enrolment of 1,981 pupils. Expenditure by the Department on these schools in the year ended 30th June, 1946, amounted to £39,175.

There were also four private schools with 40 regular teachers and an effective enrolment of 1,016 pupils.

#### PUBLIC AND PRIVATE SCHOOLS AND TEACHING STAFFS.

The following table shows the total number of public and private schools in operation at the end of various years since 1921, and the aggregate teaching staff in each group of schools. The figures in this table, and in the subsequent tables relating to public and private schools, include secondary schools, but are exclusive of evening youth colleges, technical colleges, private kindergarten and nursery schools, shorthand and business colleges, etc.

TABLE 780.—Public and Private Schools and Teaching Staffs, 1921 to 1946.

Year.	Schools.			Teaching Staffs.						
	Public. *	Private.	Total.	In Public Schools.*			In Private Schools.			Grand Total.
				Men.	Women.	Total	Men.	Women.	Total.	
1921	3,170	694	3,864	3,554	5,118	8,672	475	2,508	2,983	11,655
1929	3,104	745	3,849	4,624	6,368	10,992	655	2,846	3,501	14,493
1931	3,195	751	3,946	4,940	6,641	11,581	652	2,933	3,585	15,166
1936	3,416	763	4,179	5,606	6,008	11,614	716	2,910	3,626	15,240
1941	3,097	762	3,859	5,276	5,929	11,205	847	3,169	4,016	15,221
1942	2,865	742	3,607	5,019	6,093	11,112	831	3,144	3,975	15,087
1943	2,753	741	3,494	4,771	6,467	11,238	819	3,152	3,971	15,199
1944	2,725	745	3,470	4,659	6,543	11,202	858	3,207	4,065	15,267
1945	2,690	733	3,423	4,790	6,424	11,214	877	3,247	4,124	15,338
1946	2,686	728	3,414	5,782	6,087	11,869	943	3,263	4,206	16,075

\* Including subsidised schools.

The number of teachers in public schools, as shown above, is exclusive of teachers absent on military duty during the war years, and of students in training, who numbered 1,984 in 1946, including 974 men. In the case of private schools, visiting or part-time teachers are excluded, because some of them attended more than one school and were included in more than one return.

#### PUBLIC AND PRIVATE SCHOOLS—PUPILS ENROLLED.

A comparative review of the enrolment of children at public and private schools is restricted to the last term in each year, as the details in regard to private schools in the earlier years are available for that term only. The following statement shows the gross enrolment during the December term at all schools and colleges in New South Wales, primary and secondary, other than evening youth colleges, private kindergarten and nursery schools, and technical and business schools and colleges. The "gross" enrolment consists of all pupils on the roll during the term, including those who left school or were transferred to another school. The enrolment figures for private schools include pupils at charitable schools. (These were not included in the figures published in earlier issues of the Year Book.)

TABLE 781.—Public and Private Schools—Pupils Enrolled During December Term, 1921 to 1946.

Year.	Public Schools.*			Private Schools.			Public and Private Schools.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
1921	163,699	151,529	315,228	36,460	42,857	79,307	200,149	194,386	394,535
1929	193,872	177,458	371,330	42,809	49,592	92,401	236,681	227,050	463,731
1931	202,873	185,008	387,881	43,715	50,307	94,022	246,588	235,315	481,903
1936	196,591	181,124	377,715	48,041	52,691	100,732	244,632	233,815	478,447
1941	186,879	171,128	357,507	50,679	54,640	105,319	237,058	225,768	462,826
1942	183,917	169,892	353,809	51,040	54,575	105,615	234,957	224,467	459,424
1943	185,391	170,384	355,775	53,206	56,608	109,814	238,597	226,992	465,589
1944	185,033	169,191	354,224	56,113	58,524	114,637	241,146	227,715	468,861
1945	184,547	169,083	353,630	56,294	58,893	115,187	240,841	227,976	468,817
1946	187,194	173,164	360,358	56,653	58,835	115,488	243,847	231,999	475,846

\* Including subsidised schools.

The total enrolment of pupils in public and private schools was 478,447 in 1936 and it declined in each subsequent year to 459,424 in 1942, notwithstanding the extension of the period of compulsory school attendance in the years 1940 to 1942. There was a subsequent increase to 475,846 in 1946. Enrolments at schools are affected by fluctuations in the number of children born.

Enrolments at public schools declined from 377,715 in 1936 to 353,630 in 1945, but increased to 360,358 in 1946. Those at private schools increased from 100,732 in 1936 to 115,488 in 1946, or by 14.6 per cent.

In the public schools there are more boys than girls, the proportions in 1946 being boys 52 per cent. and girls 48 per cent. In the private schools girls are in a majority; the proportion of girls included in total enrolments declined from 53.5 per cent. in 1931 to 52.3 per cent. in 1936 and to 50.9 per cent. in 1946.

The proportion of children enrolled in public schools increased from 79.9 per cent. of the total enrolment in 1921 to 80.5 per cent. in 1931. Subsequently the ratio declined slowly to 78.2 per cent. in 1939 and to 75.4 per cent. in 1945; it increased to 75.7 per cent. in 1946.

The following table shows the relative gross enrolments at public and private schools:—

TABLE 782.—Public and Private Schools—Proportionate Enrolment, December Term, 1921 to 1946.

Year.	Total Enrolment, All Ages.		Year.	Total Enrolment, All Ages.	
	Public Schools.	Private Schools.		Public Schools.	Private Schools.
	per cent.	per cent.		per cent.	per cent.
1921 ...	79.9	20.1	1942 ...	77.0	23.0
1929 ...	80.1	19.9	1943 ...	76.4	23.6
1931 ...	80.5	19.5	1944 ...	75.5	24.5
1936 ...	78.9	21.1	1945 ...	75.4	24.6
1941 ...	77.2	22.8	1946 ...	75.7	24.3

## CHILDREN RECEIVING EDUCATION.

There are few children of statutory school age in New South Wales who are not reached in some way by the education system. For children handicapped by physical or mental deficiency or by remoteness from centres of population, special schools have been established by the Department of Education and private organisations; these include a correspondence school, schools at hospitals and child welfare homes, subsidised schools in isolated rural areas and schools for blind and deaf mutes. In certain cases the Department subsidises the transport of children to school.

Children of statutory school age not enrolled consist mainly of those receiving private tuition at home and those exempted from attendance at school for special reasons.

The following comparison indicates the degree of regularity of attendance among children enrolled at public and private schools:—

TABLE 783.—Public and Private Schools—Attendance of Pupils,  
1921 to 1946.

Year.	Public Schools.			Private Schools.		
	Average Weekly Enrolment.	Average Daily Attendance.	Ratio of Attendance to Enrolment.	Average Weekly Enrolment.	Average Daily Attendance.	Ratio of Attendance to Enrolment.
			per cent.			per cent.
1921 ...	292,264	248,605	85.1	74,336	65,222	87.7
1929 ...	346,644	298,743	86.1	84,997	77,797	91.5
1931 ...	366,378	322,816	88.1	87,380	80,005	91.6
1936 ...	353,870	310,450	87.7	94,609	84,674	89.5
1941 ...	333,024	291,191	87.4	98,256	88,498	90.1
1942 ...	325,884	275,722	84.6	96,852	86,448	89.3
1943 ...	333,317	285,873	85.8	105,022	90,630	86.3
1944 ...	335,965	293,133	87.3	107,934	96,738	89.6
1945 ...	335,915	293,251	87.3	109,914	97,951	89.1
1946 ...	336,615	291,358	86.8	109,726	97,428	88.8

The "average weekly" enrolment includes children temporarily absent through illness or other causes, but excludes those known to have left the school. The "average daily attendance" is based on the attendance on each school day in the year.

The proportion of attendance to enrolment signifies that on the average children attend less than four and a half days in a school week of five days.

## PUBLIC AND PRIVATE SCHOOLS—AGE DISTRIBUTION OF PUPILS.

The period of compulsory attendance at school was from age 7 to 14 years in 1917 to 1939; from age 6 to 14 years in 1940; from age 6 to 14 years 4 months in 1941; from age 6 to 14 years 8 months in 1942; and from age 6 to 15 years since the beginning of 1943.

The following table shows the age distribution of public and private school pupils enrolled during 1921, 1929 and later years to 1940. (Particulars since 1940 are set out in Table 785.) The figures represent the gross enrolment during December term at primary and secondary schools, omitting those enumerated on page 904.



TABLE 784.—Public and Private Schools—Age Distribution of Pupils, 1921 to 1940.

Year.	Public Schools.				Private Schools.			
	Under 7 years.	7 years and under 14.	14 years and over.	Total.	Under 7 years.	7 years and under 14.	14 years and over.	Total.
Gross Enrolment, December Term.								
1921 ...	41,938	246,136	27,154	315,228	12,770	54,294	12,243	79,307
1929 ...	52,943	282,517	35,870	371,330	15,758	61,844	14,799	92,401
1931 ...	53,120	288,730	46,031	387,881	15,552	62,693	15,777	94,022
1936 ...	54,098	286,525	37,092	377,715	17,119	67,641	15,972	100,732
1937 ...	53,118	280,309	36,795	370,222	16,937	68,085	16,087	101,109
1938 ...	50,855	278,080	38,117	367,052	16,563	68,982	16,871	102,416
1939 ...	50,805	271,519	40,810	363,134	16,119	67,725	17,545	101,389
1940 ...	52,698	266,643	40,436	359,777	18,202	67,396	17,565	103,163

Owing to changes in the age period of compulsory attendance and in the basis of records of enrolment (gross or effective), the figures in the foregoing table (No. 784) are not comparable with those for later years.

The pupils enrolled in the years 1941 to 1947 are classified in the following table in age groups based on the period of compulsory school attendance current since 1943. The particulars of public school pupils relate to effective enrolment at a date in the first week of August in each year, but for private school pupils the figures for the four years 1941 to 1944 relate to gross enrolment, December quarter. The "effective" enrolment is the actual enrolment at a date and is exclusive of all pupils believed to have left the school.

TABLE 785.—Public and Private Schools—Age Distribution of Pupils, 1941 to 1947.

Year.	Public Schools.				Private Schools.			
	Under 6 years.	6 years and under 15.	15 years and over.	Total.	Under 6 years.	6 years and under 15.	15 years and over.	Total.
Effective Enrolment in August.					Gross Enrolment—December Term.			
1941 ...	22,248	301,376	13,449	337,073	9,675	95,644		105,319
1942 ...	21,525	298,902	12,753	333,180	10,024	95,591		105,615
1943 ...	22,060	300,295	16,305	338,660	10,611	86,412	12,791	109,814
1944 ...	23,988	296,316	18,168	338,472	11,348	89,671	13,618	114,637
Effective Enrolment in August.								
1945 ...	25,635	295,153	18,080	338,868	11,757	88,489	11,595	111,841
1946 ...	27,076	295,631	16,629	339,336	11,868	88,192	11,710	111,770
1947 ...	30,150	299,861	15,360	345,371	12,402	89,544	11,350	113,296
Boys ...	15,572	154,324	9,274	179,170	6,019	42,920	6,311	55,250
Girls ...	14,578	145,537	6,086	160,201	6,383	46,624	5,039	58,046

The increase in the enrolment of children under six years of age since 1945 is mainly due to an increase in births in New South Wales since 1940. There is a certain amount of duplication in the gross enrolment figures for private schools in the years 1941 to 1944.

Details as to the ages of children in the various classes at public schools are published annually in the report of the Minister for Education. (See also pages 913 and 915.)

#### PUBLIC AND PRIVATE SCHOOLS—RELIGIONS OF PUPILS.

Particulars of the religion of each child attending a public school are obtained upon enrolment, but such information is not available regarding pupils of private schools. Any analysis of the religions of school pupils is restricted, therefore, to a comparison of the number of children of each denomination enrolled at public schools and the number of children (irrespective of religion) attending schools conducted under the auspices of the various religious denominations.

Such a comparative review of the aggregate enrolment in primary and secondary schools (public and private) during the December term of various years is given below. Particulars of the religious denomination of public school pupils in 1945 and 1946 were in respect of individual enrolments for the whole year. The "individual" enrolments consist of distinct children who attended a public school during the whole or some portion of the year, those who received instruction at more than one public school during the year being counted only once.

TABLE 786.—Public and Private Schools—Religions of Pupils, 1921 to 1946.

Year.	Public Schools— Denomination of Children Enrolled.					Children in Private Schools— Denomination of Schools.			
	Church of England.	Roman Catholic.	Presby- terian.	Methodist	Other.	Church of England.	Roman Catholic.	Unde- noma- tional.	Other.
Gross Enrolment, December Term.									
1921 ...	176,998	35,532	37,497	44,210	20,991	5,417	63,486	8,400	2,004
1929 ...	210,286	39,614	47,232	49,447	24,751	6,220	75,311	7,696	3,174
1931 ...	218,333	42,590	49,200	51,244	26,514	5,459	79,684	6,300	2,579
1936 ...	213,216	41,202	47,043	49,295	26,959	5,269	85,449	6,498	3,516
1941 ...	204,075	39,484	43,959	45,349	24,640	5,759	88,827	6,840	3,886
1942 ...	203,472	38,766	43,318	44,539	23,714	6,098	89,259	6,169	4,089
1943 ...	205,173	38,047	43,339	44,945	24,271	6,383	92,332	6,496	4,603
1944 ...	205,324	37,254	42,722	44,865	24,059	7,123	95,196	7,095	5,283
Individual Enrolment, Whole Year.									
1945 ...	210,216	40,287	43,926	45,952	24,072	7,415	95,199	7,309	5,264
1946 ...	213,503	40,992	44,655	46,207	24,566	8,058	95,162	6,769	5,499
Proportion per cent. of all pupils enrolled.									
1921 ...	44.9	9.0	9.5	11.2	5.3	1.4	16.1	2.1	0.5
1929 ...	45.4	8.5	10.2	10.7	5.3	1.3	16.2	1.7	0.7
1931 ...	45.3	8.9	10.2	10.6	5.5	1.1	16.6	1.3	0.5
1936 ...	44.6	8.6	9.8	10.3	5.6	1.1	17.9	1.4	0.7
1941 ...	44.1	8.5	9.5	9.8	5.3	1.3	19.2	1.5	0.8
1942 ...	44.3	8.4	9.4	9.7	5.2	1.3	19.4	1.4	0.9
1943 ...	44.1	8.2	9.3	9.6	5.2	1.4	19.8	1.4	1.0
1944 ...	43.8	8.0	9.1	9.6	5.1	1.5	20.3	1.5	1.1
1945 ...	43.5	8.3	9.1	9.5	5.0	1.6	20.3	1.6	1.1
1946 ...	43.7	8.4	9.1	9.5	5.0	1.7	20.0	1.4	1.2

Of the total enrolment in public schools, children of the Church of England constituted 56.1 per cent. in 1921, and 57.7 per cent. in 1946. Children of the Roman Catholic faith attending public schools represented 11.3 per cent. in 1921 and 11.1 per cent. in 1946. Of the total enrolment in private schools, children attending Roman Catholic schools constituted 80 per cent. in 1921, 81.5 per cent. in 1929, and 82.4 per cent. in 1946.

*Religious Instruction in Public Schools.*

The Public Instruction Act, 1880, provides that religious instruction may be given in public schools by visiting ministers and teachers of religious bodies for a maximum period of one hour in each school day, and the following table indicates the number of lessons in special religious instruction given in public schools during the past five years.

TABLE 787.—Religious Instruction in Public Schools, 1942 to 1946.

Denomination.	Number of Lessons.				
	1942.	1943.	1944.	1945.	1946.
Church of England ... ..	63,053	66,706	68,059	64,489	71,252
Roman Catholic ... ..	22,329	22,435	23,891	23,628	24,811
Presbyterian ... ..	23,120	26,293	26,295	25,231	28,087
Methodist ... ..	28,945	31,637	31,558	30,555	33,622
Other Denominations ... ..	18,161	19,600	20,404	20,339	23,021
Total ... ..	155,608	166,671	170,207	164,242	180,793

PUBLIC AND PRIVATE SCHOOLS—SAVINGS BANKS.

A system of school savings banks in connection with public schools was commenced in the year 1887 and was extended later to private schools. Deposits are received by the teachers, and an account for each depositor is opened at the local branch or agency of the savings bank.

At 30th June, 1947, there were 2,591 school savings banks with 164,067 depositors, and the balance to credit of accounts was £680,806, as compared with 168,545 accounts and balance £635,860 at 30th June, 1946.

PUBLIC SCHOOLS.

Some public secondary schools are conducted in conjunction with a primary school, and in the following classification such schools are included in both groups. The number of individual schools, excluding evening youth colleges, was 2,686 in 1946.

TABLE 788.—Classification of Public Schools.

Type of School.	Schools at end of year.			Type of School.	Schools at end of year.		
	1944.	1945.	1946.		1944.	1945.	1946.
<b>Primary Education—</b>				<b>Secondary Education—</b>			
Public ... ..	1,846	1,844	1,850	High ... ..	52	53	54
Provisional ... ..	551	519	529	Junior High ... ..	9	9	9
Half-time and Travelling ... ..	9	9	5	Correspondence ... ..	1	1	1
Correspondence ... ..	1	1	1	<b>Central Schools—</b>			
Subsidised ... ..	209	207	187	Intermediate High ... ..	44	44	42
Special (Hospital, Reform- atory, etc.) ... ..	24	27	29	Junior Technical ... ..	27	27	26
Nursery ... ..	5	7	7	Commercial ... ..	9	7	6
				Home Science ... ..	36	34	32
				District Rural ... ..	16	16	15
				Other ... ..	114	128	134
<b>Total—Primary ... ..</b>	<b>2,645</b>	<b>2,614</b>	<b>2,608</b>	<b>Total—Secondary ... ..</b>	<b>307</b>	<b>318</b>	<b>319</b>

Composite courses in secondary education are provided at schools other than the secondary schools shown above. In 1946 this type of instruction was provided at 1,162 public schools for approximately 4,200 pupils.

At a number of small country schools not classified in the table as secondary, pupils may, with the teacher's assistance, secure a year's course of secondary instruction by means of lesson sheets. (See page 916.)

#### *Types of Public Primary Schools.*

Primary work in its various stages is undertaken in public schools classified broadly into three groups:—(a) Primary schools in more or less populous centres; (b) schools in isolated and sparsely-settled districts, viz., provisional, half-time, subsidised schools, and one travelling school; and (c) a correspondence school instructing children so isolated as to be unable to attend a school.

A public school may be established in any locality where the attendance of twenty children is assured. In most schools boys and girls are taught together. Schools with an average attendance of 320 pupils are divided into two departments, viz., infants (1st and 2nd class) and others (3rd to 6th class), and those with an attendance of 620 into three departments, viz., boys, girls, and infants.

Small schools are not established where it is convenient to arrange for the daily conveyance of the pupils to an adjacent school. In such cases the teachers and parents and citizens' associations make arrangements for the transport of the children, and the Department of Education grants a subsidy towards the cost of conveyance. The subsidy amounted to £27,374 in 1945 and £59,669 in 1946. Pupils travelling to school by Government transport services are conveyed without charge by trains and at concession rates by trams and omnibuses.

Provisional schools are maintained where there is an average attendance of nine pupils and where doubt exists as to the permanence of the settlement. At the end of 1946 there were 529 such schools in operation, with an enrolment of 8,721.

Half-time schools are established where a number of children sufficient to maintain a minimum attendance of nine pupils can be collected in two groups, not more than 10 miles apart. One teacher divides his time between the two groups, so arranging that home-work and preparatory study shall occupy the time of each pupil in his absence from either school. There were 4 half-time schools with an enrolment of 39 pupils at the end of 1946.

In sparsely populated districts where attendance at a public school is impracticable, a single family with at least three children of school age may establish a subsidised school by engaging a teacher with the approval of the Department of Education, or two or more families may combine to do so.

The teacher receives from the Department of Education an annual subsidy in addition to the remuneration paid by the parents. In the eastern portion of the State the subsidy in 1946 was at a minimum rate of £37 10s. per annum, increasing according to the average monthly attendance to a maximum of £110 per annum. Elsewhere the minimum rate was £41 5s. and the maximum £120 per annum.

The course in subsidised schools is as far as practicable the same as in primary schools, and a post-primary course may be given by means of leaflets issued by the correspondence school. The schools are subject to inspection by the public school inspectors. Subsidised schools have declined each year since 1935. There were 187 schools with an average weekly enrolment of 1,625 pupils in 1946, compared with 771 schools and 6,172 pupils in 1935.

#### *Correspondence School.*

The Correspondence School with 147 teachers is located in Sydney for teaching children residing in various parts of the State who are unable to attend school.

Pupils are not admitted to the school until they reach the age of six years. In 1946 the enrolment was 5,045 primary and 824 secondary pupils. In addition to teaching these children, the correspondence school issues leaflets for primary education to subsidised schools and for secondary education to small country schools. Educational talks are broadcast each week.

There is reciprocity between the Correspondence School and the Sydney Technical College in regard to teaching certain secondary and technical subjects by correspondence.

#### *Primary Education—Courses and Pupils.*

Where facilities are available, primary education in public schools may include nursery training for children aged two to five years and kindergarten training for 5-year-old children. Formal education begins at the age of six years, when school attendance becomes compulsory. It is given in six classes and is normally completed when the pupil is about 12½ years of age; the first two classes comprise the infants' course.

At the public nursery schools, children are medically examined on enrolment and grouped according to age and health. At each school provision is made for medical attention. The children attend from 9 a.m. to 3.30 p.m. with an interval of two hours for rest. Milk and hot midday meals are provided. Activities include drawing, painting, handwork and drama-

tization. In 1946 there were seven public nursery schools in New South Wales with a total enrolment of 844.

Where accommodation is available, kindergarten classes, providing substantially the same training as nursery schools, are attached to infants' schools. In the infants' schools two years' instruction is given in reading, writing, composition and arithmetic, but a part of each day is reserved for activities such as occupy children in the nursery schools and kindergartens. Primary classes—third to sixth inclusive—provide instruction in English (with emphasis on speaking, reading, composition and spelling), social studies (history, civics and geography), mathematics, nature study, arts and crafts (including drawing, music, woodwork, needlework, etc.) and physical education.

The following table shows primary school pupils in classes since 1941, based on the effective enrolment on the first Friday of August in each year. Subsidised schools are excluded.

TABLE 789.—Public Schools—Pupils Receiving Primary Education, According to Sex and Class, 1941 to 1946.

EFFECTIVE ENROLMENT IN AUGUST.

Year.	Primary Pupils.*								All Pupils- in Public Schools.*
	Kinder- garten.†	Class 1.	Class 2.	Class 3.	Class 4.	Class 5.	Class 6.	Total.	
Boys.									
1941	9,383	23,933	18,422	19,111	19,075	20,735	21,982	133,241	175,866.
1942	9,344	24,046	18,122	18,286	19,114	19,565	21,147	129,624	173,181
1943	10,208	24,996	18,328	18,037	18,345	19,125	20,290	129,329	176,207
1944	11,129	25,569	19,071	18,112	17,786	18,046	18,641	128,954	176,498
1945	12,089	25,554	19,670	19,062	18,083	17,718	18,433	130,609	176,480.
1946	12,796	26,100	19,972	19,556	18,847	17,953	17,392	132,616	176,612
Girls.									
1941	8,702	21,566	17,056	17,291	18,406	19,418	21,121	123,620	161,207
1942	8,754	21,714	16,739	17,255	17,370	18,531	20,474	120,837	159,999.
1943	9,492	22,295	16,947	16,872	17,210	17,698	20,076	120,590	162,453
1944	10,402	22,638	17,670	17,041	16,957	17,418	17,793	119,919	161,974
1945	11,125	23,033	17,907	17,915	17,389	16,948	17,390	121,767	162,388
1946	12,136	23,337	18,381	18,252	17,829	17,183	16,915	124,033	162,724
Total.									
1941	18,145	45,499	35,478	36,402	38,081	40,153	43,103	256,861	337,073.
1942	18,098	45,760	34,861	35,541	36,484	38,096	41,621	250,461	333,180.
1943	19,700	47,291	35,275	34,909	35,555	36,823	40,366	249,919	338,600.
1944	21,531	48,207	36,741	35,153	34,743	36,064	36,434	248,873	338,472.
1945	23,214	48,587	37,637	36,977	35,472	34,666	35,823	252,376	338,868.
1946	24,932	49,437	38,353	37,808	36,676	35,136	34,307	256,649	339,336

\* Excluding subsidised schools. † Including nursery schools.

The relatively high enrolment in first class is due to the fact that children under six years of age are enrolled in first class for two years in succession at schools where there is no provision for kindergarten classes.

Between 1941 and 1946, kindergarten and first class pupils increased by 10,725 or 16.8 per cent. In the same period, sixth class pupils declined by 8,796 or 20.4 per cent. and fifth class declined by 5,017 or 12.5 per cent. Between 1941 and 1944 the total number of primary pupils in public schools declined from 256,861 to 248,873, but the number increased to 256,649 in 1946, owing to the increased rate of enrolment since 1943. The proportion of boys to girls has remained fairly constant, there being 9,621 more boys than girls in 1941 and 8,583 more boys than girls in 1946.

The fluctuations in the enrolment of primary pupils in classes, as shown for public schools in Table 789, are primarily the result of variations in the number of births in New South Wales. In particular, the decline in fifth and sixth class enrolments between 1941 and 1946 was a result of a decline in the number of births during the period of economic depression 1930 to 1935. The number of births in New South Wales was only 43,335 in 1934, as compared with an annual average of 53,814 in the period 1925 to 1929. Between 1934 and 1941 there was an average annual increase of 1,200 in births, and this is reflected in the steady increase from 1941 to 1946 in enrolments in the kindergarten and in the first and second classes. The number of births has increased considerably since 1941, reaching 57,265 in 1943 and 67,247 in 1946; this indicates that the enrolment of children in lower primary classes (in both public and private schools) should increase during the next six years.

The following table shows a classification of primary pupils in public schools in 1946, according to age and class:—

TABLE 790.—Public Schools—Pupils Receiving Primary Education,  
According to Age and Class, 1946.

Age in Years.	Number of Pupils—Effective Enrolment in August, 1946.*							
	Kinder- garten.	Class 1.	Class 2.	Class 3.	Class 4.	Class 5.	Class 6.	Total Primary.
Under 6 ...	22,224	4,834	18	...	...	...	...	27,076
6 and under 7 ...	2,539	30,472	2,020	3	...	...	...	35,034
7 " " 8 ...	132	11,669	21,735	1,417	6	...	...	34,959
8 " " 9 ...	14	1,838	11,730	19,278	1,465	9	...	34,334
9 " " 10 ...	10	401	2,088	12,725	18,004	1,463	11	34,702
10 " " 11 ...	8	133	486	3,041	12,228	15,955	1,415	33,266
11 " " 12 ...	3	52	159	769	3,581	11,961	14,571	31,096
12 and over ...	2	38	117	575	1,392	5,748	18,310	26,182
Total ...	24,932	49,437	38,353	37,808	36,676	35,136	34,307	256,649

\* Excluding Subsidised Schools.

#### *Secondary Education in Public Schools.*

The principal public schools providing secondary education are classified as high, central and "secondary" schools. High schools are separate units, providing a full secondary course of five years. Central schools are primary schools where secondary instruction is provided for two or more years and the average attendance in secondary classes is 20 pupils; they include schools designated as intermediate high, junior technical, home science, commercial and district rural. "Secondary" schools are separate units with a minimum average attendance of 300 pupils, providing secondary instruction for three or more years; they include junior high schools (courses up to four years in duration) and, where no primary school is attached, home science, commercial and junior technical schools.

Particulars of the principal types of public secondary schools and the average weekly enrolment of secondary pupils in each year 1944 to 1946 are shown in the following table; all "secondary" schools, except the junior high schools, are included in the figures for central schools.

TABLE 791.—Public Schools—Principal Types of Secondary Schools and Average Weekly Enrolment, 1944 to 1946.

Type of School.	1944.		1945.		1946.	
	No. of Schools.	Average Weekly Enrolment.	No. of Schools.	Average Weekly Enrolment.	No. of Schools.	Average Weekly Enrolment.
High ... ..	52	31,100	53	30,733	54	30,082
Junior High ... ..	9	3,992	9	3,877	9	3,690
Central—						
Intermediate High ...	44	10,573	44	10,092	42	9,487
Commercial ... ..	9	1,735	7	1,366	6	1,206
Junior Technical ...	27	11,882	27	11,205	26	10,164
Home Science ... ..	36	14,962	34	14,214	32	13,057
District Rural ... ..	15	2,354	15	2,279	15	2,245
*Other ... ..	115	7,628	129	8,276	135	8,708

\* Includes Secondary Section of Correspondence School.

In 1946 the six commercial schools included two separate units (or "secondary" schools), and the 26 junior technical and 32 home science schools each included ten separate units. The table above does not include subsidised schools with secondary pupils, primary schools with an average attendance of less than 20 secondary pupils, or evening youth colleges.

Enrolment is competitive at all agricultural high schools and at high, junior high and intermediate high schools in the metropolitan area, Newcastle and Wollongong. Pupils are selected for these schools by special departmental committees on the basis of the child's primary school record, intelligence tests and the recommendation of the principal of the school last attended. Pupils for all other public secondary schools are selected by the district inspectors on the basis of the pupil's primary school record (including the results of intelligence tests made in fourth, fifth and sixth classes).

Hostels for high school students required to live away from home are conducted by the Department of Education at East and West Maitland and at Albury. Hostels at other places are conducted by local committees and are subsidised by the Department. Students boarding at the hostels are required to pay fees.

During the first three years of secondary education, the pupil is required to study not less than six nor more than eight subjects, including English and either history or social studies or science. The pupil may select the other subjects from five groups which include foreign languages, science, mathematics, business principles, and a group of eight practical and technical subjects (e.g., music, needlework, home economics, woodwork and farm mechanics). In the fourth and fifth years, six subjects must be studied, one being English and the others selected from not less than three out of five groups of subjects similar to those set for the first three years, except that business principles is replaced by history, social studies and economics. Guidance in the selection of courses is given by school counsellors (see page 920).

The junior technical, home science, commercial and rural schools usually have special facilities for the study of the practical and technical subjects indicated by the designation of the school, but the study of such subjects is not confined to these schools; for instance, commercial courses are



provided at home science schools. The high schools include two home science, three technical and three agricultural. A full secondary course of five years is provided at the Conservatorium of Music. Particulars of agricultural education in public schools are given on page 917.

Since 1920 there has been a steady increase in the provision of facilities for secondary education in public schools, and this is reflected in the enrolment figures. In 1921 approximately 8 per cent. of all pupils enrolled in public schools were receiving secondary education, as compared with 22 per cent. in 1939 and 26 per cent. in 1944; there was a slight decrease to 24 per cent. in 1946.

The following table shows secondary pupils in classes since 1941, according to the effective enrolment on the first Friday in August each year. Similar details in respect of earlier years are not available on the same basis. Secondary pupils at primary schools where the secondary enrolment is less than 20 are included, but subsidised schools and evening youth colleges are excluded.

TABLE 792.—Public Schools—Pupils Receiving Secondary Education, According to Sex and Class, 1941 to 1946.

EFFECTIVE ENROLMENT IN AUGUST.

August.	Secondary Pupils.*						All Pupils in Public Schools.*
	First Year.	Second Year.	Third Year.	Fourth Year.	Fifth Year.	Total.	
	Boys.						
1941 ...	19,388	12,371	7,540	1,909	1,417	42,625	175,866
1942 ...	19,366	13,308	7,812	1,782	1,289	43,557	173,181
1943 ...	20,080	14,493	8,529	2,308	1,468	46,878	176,207
1944 ...	19,619	14,497	9,054	2,567	1,807	47,544	176,498
1945 ...	18,439	13,741	9,038	2,657	1,996	45,871	176,480
1946 ...	18,125	12,982	8,304	2,619	1,966	43,996	176,612
	Girls.						
1941 ...	18,367	11,353	5,957	1,149	761	37,587	161,207
1942 ...	18,335	12,520	6,484	1,110	713	39,162	159,099
1943 ...	18,741	13,509	7,267	1,501	845	41,863	162,453
1944 ...	18,299	13,712	7,344	1,684	1,016	42,055	161,974
1945 ...	17,115	13,242	7,425	1,673	1,166	40,621	162,388
1946 ...	16,678	12,380	6,942	1,527	1,164	38,691	162,724
	Total.						
1941 ...	37,755	23,724	13,497	3,058	2,178	80,212	337,073
1942 ...	37,701	25,828	14,296	2,892	2,002	82,719	333,180
1943 ...	38,821	28,002	15,796	3,809	2,313	88,741	338,060
1944 ...	37,918	28,209	16,398	4,251	2,823	89,599	338,172
1945 ...	35,554	26,983	16,463	4,330	3,162	86,492	338,868
1946 ...	34,803	25,362	15,246	4,146	3,130	82,687	339,336

\* Subsidised schools and evening youth colleges are not included.

These figures indicate that less than half the first year pupils complete three years of secondary instruction in public schools and less than 10 per cent. complete the full course of five years. There were 37,701 first-year pupils in 1942 but only 16,398 third-year pupils in 1944, indicating that more than 56 per cent. left between first and third year. The intermediate certificate is awarded on completion of three years of the secondary course and, as attendance ceases to be compulsory at the age of 15 years, only a small proportion of the pupils remain for the full course.

At public schools slightly more than half the pupils in the first three years of secondary education are boys, and in the fourth and fifth years the

proportion exceeds 60 per cent. of the total. In 1946 boys comprised 52.1 per cent. of first-year, 54.5 per cent. of third-year, and 62.8 per cent. of fifth-year pupils.

The decline in the number of births in the depression years affected to some extent the enrolment of first-year pupils in public schools, which decreased from 38,821 in 1943 to 34,803 in 1946. Second-year pupils declined from 28,209 in 1944 to 25,362 in 1946, and third-year pupils from 16,463 in 1945 to 15,246 in 1946.

The following table shows secondary pupils in public schools in 1946, classified according to age and class:—

TABLE 793.—Public Schools—Pupils Receiving Secondary Education, According to Age and Class, 1946.

EFFECTIVE ENROLMENT IN AUGUST.  
Subsidised Schools and Evening Youth Colleges Excluded.

Age in Years.	Number of Pupils.					
	First Year.	Second Year.	Third Year.	Fourth Year.	Fifth Year.	Total. (Secondary)
Under 12 ... ..	752	2	...	...	...	754
12 and under 13...	11,934	553	4	...	...	12,491
13 " " 14...	14,722	9,711	554	...	...	24,987
14 " " 15...	6,904	12,918	7,842	335	3	28,002
15 " " 16...	448	2,061	5,955	2,483	253	11,200
16 " " 17...	37	103	837	1,184	1,756	3,917
17 " " 18...	5	12	51	129	941	1,138
18 and over ...	1	2	3	15	177	198
Total ... ..	34,803	25,362	15,246	4,146	3,130	82,687

In August, 1946, 80 per cent. of the secondary pupils at public schools were under the age—15 years—when attendance is no longer compulsory; 14 per cent. were aged 15 years and 6 per cent. were 16 years or over. Nearly all the pupils under age 15 and 76 per cent. of those aged 15 years were enrolled in first, second or third-year. The majority of fourth-year pupils were aged 15 or 16 years and fifth-year pupils 16 or 17 years.

#### *Secondary Courses in Country Primary Schools.*

Composite courses are provided at public primary schools in country districts where secondary schools are not readily accessible. The courses lead to the intermediate certificate and the Public Service entrance examinations.

Secondary instruction by means of leaflets is arranged for children attending small country schools who have completed the primary course and are prepared to continue their education for at least one year. The subjects of instruction include English, mathematics, languages, art, technical subjects (for boys), and home science subjects (for girls). This system differs from instruction by correspondence in that the pupil's work is arranged and corrected by the teacher in charge of the school.

#### *Evening Youth Colleges.*

In 1946 the evening continuation schools, described in previous issues of the Year Book, were re-organised as Evening Youth Colleges. These

colleges, maintained by the Department of Education, are designed to meet the needs of adults, as well as younger people who have left school, in respect of general education and cultural and leisure activities.

An evening youth college may be established where a regular attendance of thirty students per evening can be maintained for three evenings per week. In general, the courses of instruction provided at each college are those requested by the students enrolled. Apart from general subjects, such as English, mathematics and foreign languages, instruction is given in commercial subjects, physical education and a wide variety of arts, crafts and hobbies, *e.g.*, dramatic art, dressmaking, weaving and woodwork. Courses of study may be provided for the intermediate certificate, leaving certificate and Public Service examinations. No fees are charged. School buildings and equipment are made available, but students provide their own materials.

In 1946 there were twenty-four youth colleges with an average weekly enrolment of 2,755 pupils.

The following is the record of enrolment and attendance at evening youth colleges:—

TABLE 794.—Evening Youth Colleges, 1921 to 1946.

Year.	Number of Colleges.	Average Weekly Enrolment.			Average Weekly Attendance.		
		Males.	Females.	Total.	Males.	Females.	Total.
1921	... 46	2,876	821	3,697	2,239	531	2,770
1931	... 45	3,843	1,621	5,464	3,090	1,288	4,378
1936	... 36	3,071	1,106	4,177	2,412	838	3,250
1941	... 30	2,223	540	2,763	1,689	372	2,061
1942	... 30	1,212	168	1,380	920	105	1,025
1943	... 28	1,201	190	1,391	789	116	905
1944	... 28	1,174	318	1,492	835	157	992
1945	... 26	1,281	384	1,665	831	160	991
1946	... 24	1,654	1,101	2,755	1,098	632	1,730

The enrolment at evening youth colleges declined from 4,177 in 1936 to 1,380 in 1942, but increased to 2,755 in 1946, following a re-organisation of the curricula. Women comprised 40 per cent. of the total enrolment in 1946, as compared with only 23 per cent. in 1945.

#### *Agricultural Education.*

The Government of New South Wales maintains three agricultural high schools, viz., the Yanco Agricultural High School (750 acres) in the Murrumbidgee Irrigation Area; the Hurlstone Agricultural High School (395 acres) at Glenfield, 23 miles from Sydney; and the Farrer Memorial High School (270 acres) at Nemingha, 7 miles from Tamworth. The schools at Yanco and Nemingha are mainly for resident pupils, and the Glenfield school is for day and resident pupils.

The course at these schools extends over five years, with an examination for the intermediate certificate at the end of three years, and for the leaving certificate at the conclusion of the course. Successful candidates at the intermediate certificate examination may gain entrance to the Hawkesbury Agricultural College; those successful at the examinations

for the leaving certificate may qualify for matriculation at the University or for scholarships at Teachers' Colleges. In December, 1946, there were 752 pupils at the Agricultural High Schools, viz., 401 at Hurlstone, 203 at Yanco, and 148 at Farrer.

Courses in agriculture are also given in other public secondary schools.

In co-operation with the Department of Agriculture a system of junior farmer clubs has been established in country centres. The majority of members are school pupils and instruction is given by State teachers. Advisory committees and district councils assist in organising competitions and demonstrations and in preparing exhibits for agricultural shows.

At the end of 1946 there were 313 clubs with 10,026 members, of whom approximately 4,000 had left school. Girls, as well as boys, belong to the clubs; the ages of members range from 10 to 21 years.

#### *School Forestry.*

Portions of State forests or Crown lands may be set apart for the purpose of enabling pupils of public schools to acquire some knowledge of scientific forestry and silviculture. The control and management of each school forest area is vested in a trust consisting of the inspector of public schools for the district as chairman, the teacher of the school as deputy-chairman, and two members nominated by the Parents and Citizens' Association. The trust may sell the products of the area, and any surplus over expenses may be used for educational purposes as determined by the Minister for Education.

#### *"Opportunity" Classes and Special Schools.*

The Department of Education maintains a number of special schools and classes for children who, because of ability below or above average or because of some physical disability or other special circumstances, would be handicapped in a normal class.

For primary school pupils there are "opportunity" classes, classified as "A," "B" and "C." Opportunity "A" classes, for children who are sub-normal but educable, are attached to primary schools in the metropolitan area, and, within limits fixed by their ability to travel without supervision, children may be admitted from adjacent schools. Enrolment is limited to 22 pupils per class so that individual attention may be given to each pupil. A syllabus is not fixed and a large measure of discretion is left to the teacher. Participation in the corporate school life is encouraged. Children are usually admitted at age about 9 years and remain until about 13½ years. In 1946 there were 9 opportunity "A" classes with a total enrolment of 198. For children of the type enrolled in opportunity "A" classes there is also a special residential school at Glenfield. The school serves partly as a demonstration centre and individual instruction is given with emphasis on handicrafts. The enrolment in 1946 was 64 boys and 48 girls.

Opportunity "B" classes have been organised in a number of primary schools in urban areas for children of normal capacity but backward on account of illness, irregular attendance or late enrolment, etc. The object of the treatment in the "B" classes is to enable the pupil to return to his normal primary school; enrolment is limited to 22 pupils per class. In 1946 there were 12 opportunity "B" classes with a total enrolment of 264.

Opportunity "C" classes are for primary school children of superior ability. The pupils are selected by means of scholastic and intelligence tests from the pupils between  $9\frac{1}{2}$  and 11 years of age in 4th and 5th classes. The children are enrolled for two years and grouped in classes limited to 35 pupils under special teachers. The subjects of study are those of the normal 5th or 6th class, but treatment is more advanced and there is opportunity for a variety of related activities. In 1946 there were 30 opportunity "C" classes with a total enrolment of 1,050 pupils, attached to 9 centres in the metropolitan area.

In addition to those described above there are opportunity 7th classes for 6th class pupils between 11 and 12 years of age who are considered unlikely to benefit from the normal secondary course or from a repetition of 6th class work. In the smaller country central schools, where numbers are insufficient to form an opportunity 7th class, children of this type are taught by means of a special correspondence course under the supervision of one of the teachers of the school. The syllabus for the opportunity 7th class is designed for pupils who are slow to learn. In 1946 there were opportunity 7th classes in 48 schools in the metropolitan area and in 51 schools in other districts. The total enrolment in these classes was 4,990.

There is an Activity or Handicraft school at Enmore for boys of secondary school age of average ability who have completed the primary course but whose work, particularly in academic subjects, is not in keeping with their ability. The curriculum includes general subjects, but a large proportion of the time is devoted to handicrafts, drawing and hobbies. The enrolment in 1946 was 130.

At certain hospitals the Department of Education maintains schools for children likely to remain in hospital for a long period. In December, 1946, there were 12 hospital schools with a total enrolment of 238 boys and 215 girls.

Special facilities for the education of children who are blind, deaf or otherwise infirm are being provided by the Department of Education on an experimental basis. A sight-saving class has been established at a metropolitan school for children with defective but sufficient sight to benefit from special visual methods of instruction. Children with defects of speech may receive remedial treatment from speech therapists of the School Medical Service.

An Act was passed in 1944 to provide for the education and compulsory school attendance of children who, by reason of blindness or other infirmity, are not capable of being educated by ordinary methods. The Act has not yet been proclaimed.

The Department of Education provides teachers for schools at 14 child welfare homes.

Particulars of private schools for blind and deaf mutes are given on page 924.

#### *Pre-apprenticeship and Pre-employment Classes.*

Pre-apprenticeship and pre-employment classes for selected pupils—boys and girls—who have completed two years of a post-primary course are conducted at certain technical colleges (see page 932). The intermediate examination is taken after the first year's study; in the second year the boys are prepared for the electrical, mechanical, or building trades or for commerce and the girls for commercial work (following a special pre-vocational curriculum). During 1946, 523 boys and 35 girls were enrolled.

*Physical Education.*

Physical education is compulsory for all pupils in public schools. There is a Director of Physical Education under the Director-General of Education and a course of training for teachers is provided at the Sydney Teachers' College.

Two forty-minute periods are set aside each week for physical training, and one full afternoon for sport. School camps for pupils over 11 years of age are held throughout the year at National Fitness centres at Broken Bay, Lake Macquarie and elsewhere. Weekly swimming classes are conducted each summer. In 1946-47, the number of children taught to swim was 23,359, including 11,020 in the vacation swimming class. The Public Schools' Amateur Athletic Association, which has about fifty branches throughout the State, organises inter-school sport and athletic competitions.

*Educational and Vocational Guidance.*

In the public school system there is a staff of School Counsellors, consisting of teachers trained in psychology, to assist teachers and parents in the selection of suitable school courses for the children and to help those with special difficulties. A counsellor visits the primary schools in his district. Systematic psychological tests are applied to the fourth and higher classes, and a record is kept in respect of each child for guidance purposes.

Attached to each public secondary school is a Careers Adviser to assist parents and pupils in the selection of the pupil's future vocation. Vocational guidance is given to pupils of both public and private schools by the Director of Youth Welfare in the Department of Labour and Industry and Social Welfare.

In 1946 there were 16 school counsellors in the metropolitan area and eight at other centres.

*Educational Aids.*

Educational aids employed in schools include school broadcasts, still and motion films, film strips and school libraries. In the case of public schools, equipment is provided mainly by the Parents and Citizens' Associations, with the assistance of a 20 per cent. subsidy from the Department of Education in respect of the purchase price of film projectors and library books.

The School Broadcasts Advisory Council, which arranges school broadcasts, consists of representatives of the Australian Broadcasting Commission, the Department of Education, and the teachers of public and private schools. At the end of 1946 there were approximately 1,300 receiving sets in use in public schools.

The Department of Education assumes responsibility for the maintenance of film projectors in public schools and the purchase and loan of films. At the end of 1946 approximately 760 motion films, including some produced by the Department, were available for distribution to schools, and there were sound and silent motion film projectors in 171 public schools. The amount of the film subsidy in 1946 was £1,375.

Usually there is a library at each public school in the metropolitan area and larger towns, and for the smaller schools a central library from which boxes of books may be lent to the schools in the district. The libraries are in charge of teachers trained in library work. In 1946 there were

64 district units under the central library scheme and 1854 separate libraries in public schools containing 766,000 volumes. Subsidies paid by the Department during the year amounted to £3,473.

#### PRIVATE SCHOOLS.

The position of private schools in the education system of the State has been discussed at the beginning of this chapter.

Children of statutory school age must be provided with efficient education, and a school is not recognised as efficient unless it is certified by the Minister for Education, who takes into account the standard of instruction, the qualifications of the teachers, the suitability of the school premises, and the general conduct of the school. This provision applies to both primary and secondary schools where children of statutory ages are educated. The conditions upon which benefits under the Bursary Endowment Act are extended to private secondary schools involve similar inspection and certification, and nearly all of them have been registered by the Department of Education. The standards of instruction required of private schools are the same as those of public schools of similar grade.

The total number of private schools certified by the Minister for Education in 1946 was 728. Of these, 127 were registered under the Bursary Endowment Act as qualified to provide the full secondary course, and 102 as qualified for the education of secondary pupils to the intermediate certificate stage.

#### *The Roman Catholic School System.*

The Roman Catholic schools comprise the largest group of private schools in New South Wales. They are organised to provide a complete school system of religious and secular education, comprising kindergarten, primary, and secondary schools; and there are two Roman Catholic colleges within the University of Sydney. Special schools are maintained for the training of deaf mutes and the blind (see page 924), as well as orphanages and refuge schools. There are also the training centres of the religious communities and seminaries for the education of the clergy, but particulars of these are not included in the statistics of schools.

The Roman Catholic school system is organised on a diocesan basis in eight dioceses in New South Wales. Supervision is exercised by the Bishop through clerical and lay inspectors in each diocese, and a Director of Catholic Education, appointed by the Bishops, is charged with general supervision.

The majority of the schools are parochial primary schools for the education of children from 6 to 15 years of age; at many of them secondary education to the intermediate certificate standard is provided—especially in country districts—if a Catholic secondary school is not available. These schools are parochial property and the parochial authorities are responsible for the buildings, maintenance, repairs and equipment. The cost is provided only to a small extent by school fees, and these are supplemented by parochial collections and voluntary contributions.

Secondary education, usually the five years' course leading to the leaving certificate examination, is provided at boarding colleges and secondary day schools for boys and for girls, and there are day schools where the course leads to the intermediate certificate examination. The secondary schools are registered under the Bursary Endowment Act; in secular subjects they

follow the curricula of the Department of Education and they are subject to inspection by the departmental inspectors. As a general rule, the secondary schools are the property of the religious communities who conduct them and are supported by the fees charged. In association with some of the secondary schools for boys, a separate primary school, which is parochial property, is conducted for boys from 9 to 15 years of age by the same community as the secondary school. At the secondary day schools for girls there is, in many localities, a primary department for the elementary education of pupils who proceed to the secondary courses and the fees are charged at a higher scale than in parochial primary schools.

Commercial and technical training is provided in connection with the secondary day schools, and in some separate institutions; and there are commercial schools for boys and for girls in Sydney. At two institutions—one at Lismore and the other at Campbelltown—theoretical and practical study of agriculture is combined with the regular secondary course; farm training is given also at the Westmead Home for orphan boys. In all the orphanages special attention is given to training the boys and girls in some trade or occupation as a means of future livelihood and at the Westmead Home there is a fully equipped printing shop where boys are trained in this skilled trade. Home science is a usual subject in the girls' secondary schools; needlework and art form part of the ordinary curriculum, and tuition is given in vocal and instrumental music.

The pupils of the Roman Catholic schools attend the public examinations described on page 925, also examinations conducted by the diocesan inspectors at the end of the primary and the intermediate stages. On the results of these examinations, scholarships and bursaries are awarded.

The teaching staffs are, with few exceptions, members of religious communities. Information relating to their training for teaching is shown on page 929.

*Private Schools, Teachers and Pupils.*

The following table shows particulars of the private schools of each denomination in 1945 and 1946. The figures include a number of schools attached to charitable institutions, which in previous issues of the Year Book were treated separately.

TABLE 795.—Private Schools—Teachers and Pupils, 1945 and 1946.

Classification.	1945.				1946.			
	Schools.	Teachers.	Effective Enrolment in August.	Gross Enrolment, December Term.	Schools.	Teachers.	Effective Enrolment in August.	Gross Enrolment, December Term.
Udenominational ...	89	395	6,839	7,399	78	364	6,250	6,769
Roman Catholic ...	575	3,054	92,339	95,199	575	3,127	92,102	95,162
Church of England ...	40	411	7,395	7,415	45	428	7,961	8,058
Presbyterian ...	11	145	2,967	2,945	12	162	3,106	3,120
Methodist ...	5	79	1,615	1,625	5	86	1,683	1,694
Lutheran ...	3	3	79	72	3	3	56	57
Seventh Day Adventist ...	7	25	458	476	7	23	452	460
Theosophical ...	1	5	29	29	1	4	33	27
Christian Science ...	1	4	70	67	1	5	77	75
Hebrew ...	1	3	50	50	1	4	50	66
Total ...	733	4,124	111,841	115,187	728	4,206	111,770	115,488



The number of teachers, as shown in the table, does not include those who visit schools to give tuition in special subjects only, because many of them give instruction in more than one school. The actual number of private school teachers is not recorded.

Fees are usually charged at private schools, but they vary considerably in amount. In some denominational schools the payment of fees is to some extent voluntary, and a number of scholarships and bursaries have been provided by private subscription for the assistance of deserving students. Some of the private schools are residential. There were 97,134 day scholars and 14,707 boarders in August, 1945, and 97,084 day scholars and 14,686 boarders in August, 1946.

The following statement shows the number of secondary pupils enrolled in private schools, as indicated in the returns for 1922 (the first year for which the particulars are available) and later years. The form of return was changed in 1945 in respect of the definition of secondary pupils and type of enrolment; therefore particulars for 1945 and 1946 are not comparable with those for earlier years.

TABLE 796.—Private Schools—Secondary Pupils, 1922 to 1946.

Year.	Schools.	Secondary Pupils Enrolled in Private Schools.		
		Boys.	Girls.	Total.
Gross Enrolment, December Term.				
1922 ... ..	201	5,705	5,954	11,659
1929 ... ..	316	7,408	8,379	15,787
1931 ... ..	361	8,365	8,068	16,433
1936 ... ..	376	8,582	9,563	18,145
1941 ... ..	384	12,423	11,723	24,146
1942 ... ..	406	11,787	11,865	23,652
1943 ... ..	401	14,281	13,633	27,914
1944 ... ..	397	15,653	14,086	29,739
Effective Enrolment in August.				
1945 ... ..	475	16,182	16,480	32,662
1946 ... ..	465	16,027	15,910	31,937

Prior to 1945, secondary pupils were defined in the enrolment returns as those following a course of instruction similar to that of the public secondary schools, and pupils who were not following the full secondary course were omitted. Since 1945 the returns have included all pupils above the primary stage, *i.e.*, above sixth class.

The 465 schools with secondary pupils in 1946 included 229 registered under the Bursary Endowment Act (see page 925).

#### *Private Schools—Kindergartens and Nurseries.*

The Kindergarten Union maintains free kindergartens, nursery schools and playgrounds in Sydney and Newcastle for children under statutory school age. In August, 1946, there were twenty-eight schools with an effective enrolment of 1,570 pupils. The organisation receives a State subsidy of £10,000 per annum.

The Sydney Day Nursery and Nursery Schools Association conducts thirteen nursery schools for children between the ages of two and six years; in 1946 the effective enrolment was 586. Attached to these schools are six day nurseries for children between one month and two years of age. In 1945-46 the association received as subsidy £10,000 from the State, £1,300 from the Commonwealth, and £1,654 from municipal councils.

For children of pre-school age there are numerous small kindergartens and nursery schools not attached to public or private schools or the associations described above. Statistics of these small kindergartens and nurseries are not collected.

*Private Schools for Deaf, Dumb and Blind.*

The education of deaf, dumb and blind children is undertaken at two schools conducted by the Institution for the Deaf and Dumb and the Blind, which is endowed by the State. In August, 1946, there were 165 children in the Institution's schools.

Deaf mutes are trained at two Roman Catholic institutions, one at Waratah for girls, with 74 inmates in August, 1946, and the other at Castle Hill, where 61 boys were enrolled. There were twenty-two children at a Roman Catholic school for blind children at Homebush.

The Samuel Cohen Kindergarten at Pymont serves children of pre-school age who are deficient in hearing. Approximately forty children attended the kindergarten in 1946.

*Enrolment in Private Schools.*

A comparative statement of the enrolment in certified private schools is shown below. The enrolment at the kindergarten and nursery schools described above is not included.

TABLE 797.—Private Schools—Gross Enrolment during December Term, 1921 to 1946.

Year.	Pupils on Roll during December Term.								
	Un-denominational.	Roman Catholic.	Church of England.	Presbyterian.	Methodist.	Seventh Day Adventist.	Lutheran.	Other Denominations.	Total Private Schools.
1921 ...	8,400	63,486	5,417	788	605	301	51	259	79,307
1929 ...	7,760	75,311	6,220	1,599	1,074	311	76	50	92,401
1931 ...	6,339	79,684	5,459	1,235	890	310	105	...	94,022
1938 ...	6,546	86,238	5,622	2,082	1,049	670	86	123	102,416
1939 ...	6,211	85,761	5,444	2,104	1,050	655	63	101	101,389
1940 ...	6,505	87,296	5,476	2,215	1,119	372	82	98	103,163
1941 ...	6,849	88,827	5,757	2,263	1,110	366	68	79	105,319
1942 ...	6,169	89,259	6,098	2,277	1,159	498	70	85	105,615
1943 ...	6,496	92,332	6,383	2,590	1,412	467	71	63	109,814
1944 ...	7,095	95,136	7,123	3,034	1,525	494	86	144	114,637
1945 ...	7,309	95,199	7,415	2,945	1,625	476	72	146	115,187
1946 ...	6,769	95,162	8,058	3,120	1,604	460	57	168	115,488

SCHOOL EXAMINATIONS.

To test the proficiency of students in secondary schools, a system of public examinations has been organised by the Department of Education in co-operation with private secondary schools and the University, where appropriate certificates issued by the Department are accepted as evidence

of educational qualification. The University also holds an annual matriculation examination, on the results of which a number of University scholarships and prizes are awarded.

The regulations of the Department of Education provide for the issue of certificates which mark definite stages in the progress of secondary school pupils. The intermediate certificate marks the satisfactory completion of the first three years of the secondary course in public and private schools. It is issued subject to good conduct and regular attendance, satisfactory school work in four subjects and a pass in two out of three subjects at a public examination. At the leaving certificate examination, which is held at the close of the five years of the secondary course, candidates may not take more than six subjects nor more than eight papers. A pass in four subjects is required for the issue of the leaving certificate. An appropriate pass at the leaving certificate examination may qualify a student for matriculation at the University.

The intermediate and leaving certificates are generally accepted as proof of sufficient educational qualification for admission to the State and Commonwealth Public Services (with a supplementary examination), the teaching profession, banks, and kindred bodies.

The following statement relates to the number of candidates for the intermediate and leaving certificates during the five years ended 1946:—

TABLE 798.—School Examinations, 1942 to 1946.

Year.	Intermediate Certificate.		Leaving Certificate.	
	Candidates.	Passes.	Candidates.	Passes.
1942 ...	18,106	14,205	3,917	3,150
1943 ...	20,157	16,346	4,380	3,600
1944 ...	21,097	16,460	5,399	4,248
1945 ...	20,985	16,710	6,125	4,540
1946 ...	19,811	15,990	6,116	4,844

The proportion of passes in 1946 was 78 per cent. of the candidates at the intermediate certificate examination and 79 per cent. at the leaving certificate examination.

#### SCHOLARSHIPS AND BURSARIES.

It is the policy of the State to assist promising students to obtain secondary and tertiary education by granting scholarships and bursaries and a number are provided by private endowment.

#### *Bursary Endowment Act.*

By the Bursary Endowment Act, 1912, and amendments, provision is made for State bursaries tenable in approved public or private secondary schools, in technical colleges and in the University of Sydney. The Act is administered by a board, consisting of two representatives each of the University of Sydney, the Department of Education, and private secondary schools registered under the Act. The award of bursaries is subject to a condition that the applicant's family income does not exceed a prescribed amount. This amount, for a family of three or fewer dependants, ranges

from £350 per annum in the case of bursaries awarded on the results of the bursary examination (at the end of the primary course), to £550 per annum in the case of bursaries awarded on the results of the leaving certificate examination.

The bursaries awarded and accepted in 1947 (on the results of the examinations at the end of 1946) were as follows:—300 tenable for five years—159 at public high schools and 141 at private schools; 8 for two years in pre-apprenticeship (technical) classes; 304 upon results of the intermediate certificate examination, tenable for two years; and 40 tenable at the University of Sydney. In addition, 10 bursaries were accepted for various courses at the technical colleges.

The bursaries tenable at the University are awarded at the leaving certificate examination to candidates under 19 years of age, whose parents' means are inadequate for the expense of a University education.

The number of pupils holding bursaries at 30th June, 1947, was 1,949, viz., 1,772 attending courses of secondary education, 28 enrolled at technical colleges and 149 at the University. These numbers are exclusive of 31 war bursaries.

The annual monetary allowances payable to bursars in terms of the Bursary Endowment Act at 30th June in each year 1943 to 1947 were as follows:—

TABLE 799.—Bursary Endowment Act—Bursars and Annual Allowances,\* 1943 to 1947.

At 30th June.	Number of Bursars.						Total.
	Under £10 per annum.	£10 and under £15 per annum.	£25 and under £35 per annum.	£35 and under £45 per annum.	£60 per annum.	£75 per annum.	
1943 ...	...	711	716	331	155	42	1,955
1944 ...	...	599	730	348	166	34	1,877
1945 ...	1	622	724	341	159	40	1,887
1946 ...	...	594	724	347	172	40	1,877
1947 ...	1	628	761	350	172	37	1,949

\* Exclusive of allowances for textbooks, etc.

Bursars attending courses of secondary instruction and those following University courses are allotted grants for text-books. At 30th June, 1947, the maximum amounts were:—Secondary bursars in the first, second and third years 30s. per annum, and in the fourth and fifth years 50s. per annum; and University bursars £5 per annum.

War bursaries are provided by the Bursary Endowment Board for children of incapacitated and deceased soldiers. The number in operation at 30th June, 1947, was 31, each bursar receiving £10 per annum. The total number awarded since they were initiated in 1916 was 3,250.

#### *Soldiers' Children Education Scheme.*

The Soldiers' Children Education Scheme, administered by the Repatriation Commission, applies to children (aged 13 years or over) of deceased and incapacitated ex-servicemen. Assistance in the form of a regular

allowance, is given for secondary education, technical training, and in some cases, for University education. In New South Wales 11,325 applications for assistance (including 1,710 for children of servicemen of the 1939-45 war) had been approved to 30th June, 1947. In 1946-47 Commonwealth expenditure on the scheme in New South Wales was £58,629.

*Hawkesbury Agricultural College—Bursaries, etc.*

Two bursaries, tenable at the Hawkesbury Agricultural College with exemption from education and maintenance fees, are awarded by the Department of Agriculture on the results of the intermediate certificate examination. In addition, a number of scholarships at the college are awarded by various organisations.

The Department of Agriculture also provides cadetships at the Hawkesbury Agricultural College for the training of junior livestock officers. The cadetships are tenable for periods varying from one to three years, and they cover fees and expenses up to £50 per annum, with an allowance of £25 per annum. The cadets must enter into a bond to serve the Department for at least three years after obtaining the Hawkesbury Diploma of Agriculture.

*Technical College Scholarships.*

Scholarships, conferring free tuition, are awarded annually on the results of the intermediate and leaving certificate examinations, for various courses at the technical colleges. In addition, a number of scholarships, entitling the holder to higher technical instruction free of charge, are awarded on the results of technical college examinations. In 1947 forty scholarships were awarded at the intermediate and twenty-three at the leaving certificate examinations held in 1946. Other technical college scholarships awarded numbered seventy-three.

*University Exhibitions, Scholarships, etc.*

Two hundred public exhibitions, conferring exemption from the payment of matriculation, tuition and degree fees, are awarded annually by the Senate of the University on the results of the leaving certificate examination. Half of these exhibitions are allotted to candidates in order of merit, and in allotting the balance the income of the candidate and his family is taken into account. Matriculation scholarships are awarded by the Senate and by the University Colleges from private foundations. Two scholarships, tenable at the University, with an allowance of £100 per annum for two years, and one with an allowance of £80 per annum for three years, may be awarded annually to diploma students of the Sydney Technical College.

In each year the Public Service Board of New South Wales selects a number of junior officers for free University training. The trainee receives a living allowance of £110 per annum (with an additional allowance if living away from home), and the State pays the University fees. The trainee is required to enter into a bond in the sum of £500 to continue in the public service for a period of five years after obtaining his degree.

Particulars of Teachers' College scholarships and of Commonwealth assistance to University students and reconstruction trainees are described elsewhere in this chapter.

## TRAINING OF TEACHERS.

*State Teachers' Colleges.*

Three colleges were maintained by the State during 1946 for the training of teachers for public schools, viz., Sydney (in the University grounds), Armidale, and Balmain. A fourth college was opened at Wagga in 1947.

Scholarships are awarded by the Department of Education on the results of the leaving certificate examination for a period of training which is usually two years for primary school teachers and from three to five years for secondary school teachers. University graduates may be awarded a scholarship for a year's course of professional training. Each scholarship-holder must guarantee to serve the Department for three years where the period of training is two years, or for five years in the case of longer periods of training.

In 1947 the scholarship allowance for students living at home was £64 per annum in the first two years, and £92 per annum in subsequent years; for other students the rates were higher by £52 per annum. The students receive free tuition and £3 per annum for books.

Private students may be admitted to the colleges and are required to pay fees amounting to £27 per annum.

Women students away from home live in a hostel unless specially exempted. A hostel for women is attached to each training college.

Two-year courses are provided for teachers of nursery, infants' and primary schools; there are also two-year courses for specialist teachers in various subjects and a three-year course in physical education. Teaching methods are demonstrated at special schools associated with the teachers' colleges, and practical training at other selected schools.

Courses for secondary teachers (four or five years in duration) enable the students to study for a University degree in arts, science, agriculture or economics at Sydney University or the New England University College while they receive training in the theory and practice of education. The final year is devoted to professional training at one of the Teachers' Colleges, and successful students may qualify for the post-graduate Diploma in Education. There is a similar system for training specialist teachers of music at the Conservatorium, and teachers of art at the Technical College, with the final year at the Sydney Teachers' College. Post-college training and refresher courses are provided for teachers in the service of the Department of Education. The University fees of teachers in training are paid by the Department.

Particulars of teachers enrolled at the teachers' colleges in 1937 and subsequent years are given in the following table:—

TABLE 800.—Teachers' Colleges—Students Enrolled\*, 1937 to 1946.

Year.	Scholarship Students.			Private Students.			All Students.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1937	479	569	1,048	2	9	11	481	578	1,059
1939	597	778	1,375	...	12	12	597	790	1,387
1944	375	778	1,153	4	39	43	379	817	1,196
1945	529	800	1,329	4	70	74	533	870	1,403
1946	953	898	1,851	21	112	133	974	1,010	1,984

\* Exclusive of students in Defence Services.

The number of male students increased by 154 in 1945 and further by 441 in 1946, mainly as a result of the enrolment of ex-servicemen receiving benefits under the Commonwealth Reconstruction Training Scheme in addition to scholarship benefits. Private students at the colleges increased from 12 in 1939 to 133 in 1946.

Students enrolled at the Teachers' Colleges during 1946 are classified in the following statement according to college and course:—

TABLE 801.—Teachers' Colleges—Students Enrolled during 1946.

Course and Year.	Sydney.	Balmain.	Armidale.	All Colleges.		
				Males.	Females.	Total.
Two-year Courses (mainly for primary teachers) ... ..	623	214	352	556	633	1,189
Special Courses (Physical Education, Music and Art) ...	115	...	...	42	73	115
University Courses (for secondary teachers) ... ..	325	...	97	284	138	422
Graduate Professional Course (Diploma in Education) ...	79	...	24	52	51	103
Child Welfare Course ... ..	22	...	...	19	3	22
Private Students ... ..	133	...	...	21	112	133
Total ... ..	1,297	214	473	974	1,010	1,984

In 1946, 422 students of the Teachers' Colleges, including 138 women, attended University degree courses. These included 325 students at Sydney University, viz., Arts 194, Science 104, Economics 15, and Agriculture 12; and 97 students studying Arts or Science at the New England University College. In addition, there were 79 at Sydney and 24 at Armidale studying for the post-graduate Diploma in Education.

The libraries at the teachers' colleges contained 79,630 volumes in December, 1946.

#### *Training of Teachers—Private Schools.*

Teachers in the Roman Catholic Schools, who are members of religious communities, are trained at twenty-three centres, located in different parts of the State. These centres are registered after inspection by a Board of Registration—a central body appointed by the Roman Catholic Hierarchy of New South Wales. The course of training lasts two years; the first is the novitiate year required by the communities and is devoted largely to the testing and formation of character. The second is the year of professional training; it consists of a course of study of pedagogy, combined with practical exercises and opportunities for observing experienced teachers; it is terminated by an examination in theory and practical work. The entrance qualification is the leaving certificate or its equivalent. Certificates of competence are issued in three grades—sub-primary, primary, and super-primary—to those who are successful in the examinations at the end of the course.

The Kindergarten Union of New South Wales conducts the Sydney Kindergarten and Preparatory Teachers' College at Froebel House, Waverley, where there is accommodation for thirty resident trainees. There were 150 girls in training in 1946, and of these 71 gained diplomas.

The Sydney Day Nursery and Nursery Schools Association provides a three-year course of training for nursery school teachers at Newtown. In 1946 there were 87 students.

*Classification of Public School Teachers.*

Public school teachers are classified according to their educational qualifications. Students who have completed a course of training at the Teachers' Colleges are required to obtain practical experience as teachers before they are classified.

In 1946 there were 11,682 teachers in public schools (excluding subsidised schools and technical colleges), viz., 7,982 primary teachers, 2,723 secondary teachers, and 977 specialist teachers in subjects such as manual training and home economics. Of the primary teachers, 4,220, or 52.9 per cent. were women. Of the secondary teachers, most of whom are University graduates, 1,131 or 41.4 per cent. were women.

Teachers of subsidised schools must have sufficient educational attainments to teach the curriculum of primary schools. Schools of method are held in Sydney during the mid-summer vacation for the purpose of increasing the knowledge and efficiency of these teachers. The average number of pupils enrolled in subsidised schools is less than nine per teacher, the schools being situated in remote districts.

Particulars of teachers in public and subsidised schools during the ten years, 1937 to 1946, are shown below:—

TABLE 802.—Public and Subsidised Schools—Teachers Employed, 1937 to 1946.

Year.	Public Schools.					Subsidised Schools.		
	Males.	Females.	All Teachers.			Males.	Females.	Total.
			Graduates.	Others.	Total.			
1937 ...	5,539	5,379	1,933	8,985	10,918	134	586	720
1938 ...	5,631	5,423	1,950	9,104	11,054	103	511	614
1939 ...	5,832	5,254	1,967	9,119	11,086	90	484	574
1940 ...	5,956	5,268	2,065	9,159	11,224	62	477	539
1941 ...	5,224	5,467	2,100*	8,591*	10,691	52	462	514
1942 ...	4,986	5,802	2,163	8,625	10,788	33	291	324
1943 ...	4,753	6,228	2,253	8,728	10,981	18	229	247
1944 ...	4,648	6,345	2,289	8,704	10,993	11	198	209
1945 ...	4,781	6,226	2,269	8,738	11,007	9	198	207
1946 ...	5,769	5,913	2,216	9,466	11,682	13	174	187

\* Approximate.

The figures for the years 1941 to 1945 are exclusive of teachers on war service. During this period the total number of teachers varied only slightly, the decline in the number of men being offset by an increase in women. In 1946, owing to the return of ex-servicemen, male teachers in public schools increased by nearly a thousand. The number of teachers in subsidised schools declined from 720 to 187 between 1937 and 1946.



Graduates comprised 18.9 per cent. of the teachers in public schools in 1946, as compared with 17.7 per cent. in 1937. The degrees held by the 2,216 graduates in 1946 included:—M.A. 130, B.A. 1,409, B.Ec. 218, B.Sc. 429 and B.Sc.Agr. 29. Sixty-five teachers held two or more degrees. Women graduates numbered 876 or 39.5 per cent. of total graduates.

#### TECHNICAL EDUCATION.

The system of post-school technical education under the control of the Department of Education is administered by the Director of the Technical Education Branch, with general and financial procedure independent of other branches of the education system. The courses of instruction are co-ordinated with those of the ordinary schools.

The Sydney Technical College is housed on two sites, one at Ultimo and the other at Darlinghurst, and there are six technical colleges in the suburbs. There are large colleges at Newcastle, Wollongong, Broken Hill and Lithgow, and smaller colleges in 30 country towns. In addition, four mobile units provide practical instruction in skilled trades in 12 country towns. Instruction in dressmaking, sheep and wool and other technical subjects is given by part-time and itinerant teachers in 120 country towns where no technical college is available. There are also correspondence courses in technical subjects for students unable to attend classes.

Apart from preparatory and special courses, the courses provided by the Technical Education Branch may be classified broadly into three groups: diploma and post-diploma courses of professional standard in science, engineering, commerce and the fine arts; trade courses for apprentices and others engaged in the skilled trades; and certificate courses, usually of a semi-professional nature.

There are 22 different diploma courses in the various branches of science, engineering, commerce and fine arts, leading to the Associateship of the Sydney Technical College (A.S.T.C.). This is recognised by the Australian Chemical Institute and the Institution of Engineers, Australia, as conferring professional status equivalent to that of a university graduate in similar fields of study. A standard of education equivalent to that of university matriculation is required for admission to diploma courses, but there are special preparatory classes in English, mathematics, physics, mechanics and history for those who have not reached this standard. Diploma courses are organised on a part-time basis and, in general, students must be engaged in an occupation related to the course undertaken. At least three years' occupational experience is required for most diplomas. Post-diploma courses in special subjects are held from time to time for holders of diplomas and university graduates.

Trade courses, also part-time, are designed to supplement work experience. There are more than 50 different trade courses in the various branches of the engineering, building, printing and electrical trades. Students must have reached a standard of education sufficient to enable them to follow the course; usually they must be apprenticed in the trade relating to the course, but journeymen may be admitted to trade and special post-trade courses. With some exceptions, the trade courses are in two groups; lower trade courses of three years' duration, and higher

trade courses of two years' duration. The lower trade course must be completed before commencement of the higher course, which entitles the student to the trade certificate.

There are certificate courses of three years in a variety of technical and commercial subjects, including agriculture, industrial management, dressmaking and home science. There are no occupational qualifications and the standard required is the intermediate certificate or a special entrance examination. On satisfactory completion of the course a certificate is issued.

Special courses of short duration are provided from time to time to meet particular needs.

A pre-apprenticeship course covering two years in general education and in work associated with skilled trades was introduced in 1937 for boys who have completed two years in a junior technical school and show aptitude for technical work. Upon completion of the pre-apprenticeship course, efforts are made to place students in suitable employment.

Classes in the different sections of trade and diploma courses are co-ordinated with practical needs by means of advisory committees composed of representatives of employers and employees in particular trades.

The committees visit the classes regularly and discuss with the Director and heads of departments matters relating to the maintenance of standards of efficiency in equipment and teaching.

Advisory councils have been constituted to co-ordinate the work of the committees and to facilitate the discussion of general problems arising in technical education.

The fees payable for technical classes are very low, being usually at the rate of 5s. per term of thirteen weeks for juniors, and 10s. for seniors, for one lesson per week.

Particulars of expenditure on technical education and receipts from fees, etc., since 1936 are given below:—

TABLE 803.—Technical Education—Expenditure, 1936 to 1945.

Year.	Expenditure from Revenue and Loans.				Receipts— Students' fees, &c.
	On Buildings and Sites, etc.		Other.	Total.	
	Revenue.	Loan.*			
	£	£	£	£	£
1936 ... ..	6,551	43,807	188,585	238,943	50,131
1937 ... ..	14,375	185,884	250,117	450,376	56,851
1938 ... ..	17,352	146,166	313,298	476,816	68,697
1939 ... ..	21,075	205,852	380,590	607,517	84,057
1940 ... ..	21,871	199,479	403,694	625,044	78,635
1941 ... ..	19,276	43,642	403,255	466,173	85,341
1942 ... ..	17,883	2,302	386,449	406,634	75,492
1943 ... ..	24,001	80,910	406,583	511,494	116,639
1944 ... ..	44,929	63,728	474,527	583,184	112,175
1945 ... ..	34,586	66,221	569,787	670,594	134,844

\* Includes amounts from the Unemployment Relief Fund

Expenditure since 1937 has included large sums expended on additional buildings in Newcastle and Sydney, and in acquiring sites for new technical schools.

Particulars of the teachers and students at the technical colleges in each year from 1936 to 1945 are shown below:—

TABLE 804.—Technical Education—Teachers and Students, 1936 to 1945.

Year.	Teaching Staff.					Individual Students.		
	Full-time.		Part-time.		Total.	Males.	Females.	Total.
	Males.	Females.	Males.	Females.				
1936 ...	*	*	*	*	672	14,695	6,669	21,364
1937 ...	*	*	*	*	848	18,416	7,772	26,188
1938 ...	*	*	*	*	1,062	22,739	8,126	30,865
1939 ...	203	98	832	62	1,195	27,403	9,861	37,264
1940 ...	277	104	930	54	1,365	28,123	10,413	38,536
1941 ...	289	97	1,058	51	1,495	30,368	10,615	40,983
1942 ...	289	97	1,070	59	1,515	29,942	9,439	39,381
1943 ...	356	82	966	106	1,510	26,443	8,497	34,940
1944 ...	412	98	1,030	105	1,645	29,431	10,319	39,750
1945 ...	416	82	1,479	111	2,088	30,940	11,827	42,767

\* Not available.

The number of individual students in 1945, viz., 42,767, was the highest on record and more than double the number in 1936.

A comparative statement regarding the ages of male and female students enrolled at technical classes is shown below.

TABLE 805.—Technical Education—Ages of Students, 1936 to 1945.

Year.	Age Last Birthday.								
	14 and 15.	16.	17.	18.	19.	20.	21 to 24.	25 and over.	Total Students.
Males.									
1936 ...	1,661	1,908	1,990	1,821	1,564	1,151	4,600		14,695
1937 ...	2,157	2,735	2,542	2,251	1,770	1,393	5,568		18,416
1938 ...	2,381	3,059	3,241	2,366	2,087	1,598	8,007		22,739
1939 ...	2,442	3,260	3,606	3,456	2,582	2,117	5,319	4,621	27,403
1940 ...	2,980	3,530	3,852	3,593	2,886	1,755	4,387	5,140	28,123
1941 ...	2,766	3,549	3,910	3,792	3,079	2,327	5,627	5,318	30,368
1942 ...	2,816	3,665	4,147	3,665	3,394	2,385	6,814	3,056	29,942
1943 ...	2,220	3,507	3,769	3,235	3,041	2,284	8,387		26,443
1944 ...	2,564	3,567	4,164	3,753	3,408	2,437	5,524	4,014	29,431
1945 ...	919	2,944	5,006	4,728	3,651	2,713	4,490	6,489	30,940
Females.									
1936 ...	1,481	892	744	591	493	364	2,104		6,669
1937 ...	1,795	1,149	929	710	497	392	2,300		7,772
1938 ...	1,805	1,112	992	658	532	410	2,617		8,126
1939 ...	2,297	1,488	1,329	1,014	608	450	1,231	1,444	9,861
1940 ...	2,284	1,626	1,416	1,055	764	479	1,240	1,549	10,413
1941 ...	2,307	1,508	1,378	1,067	707	537	1,346	1,765	10,615
1942 ...	2,294	1,270	1,198	867	615	416	1,270	1,509	9,439
1943 ...	1,733	1,301	1,066	868	598	466	2,465		8,497
1944 ...	2,284	1,560	1,425	1,042	718	499	1,411	1,380	10,319
1945 ...	1,750	1,412	1,389	1,122	870	719	1,826	2,739	11,827

Facilities for technical training were expanded in 1936 and a system of subsidies for apprentices at ages 19 to 25 years was in operation in 1938 and 1939. During the period 1936 to 1939, the number of students enrolled increased by 15,900 or 74 per cent., and, except for a temporary decline in 1942 and 1943, the increase has continued. The number of male students increased by 3,537 or 13 per cent. between 1939 and 1945, and female students by 1,966 or 20 per cent. In 1945 female students represented 28 per cent. of the total enrolment.

In recent years there has been a significant increase in the number of males aged 25 years or over; in 1945 there were 6,489 males and 2,739 females in this group of students. Since 1939 there have been increases at each age from 17 to 20 years inclusive, but a decrease in the younger groups.

Particulars of the courses of study for which students were enrolled in 1939 and recent years were as follows:—

TABLE 806.—Technical Education—Students and Courses, 1939 to 1945.

Course.	Individual Students.				
	1939.	1941.	1943.	1944.	1945.
Diploma ... ..	1,491	2,004	2,296	2,332	2,827
Diploma Preparatory ... ..	2,149	1,775	1,612	1,759	2,331
Trades ... ..	15,768	16,750	15,290	17,805	18,287
Art ... ..	1,424	1,447	843	1,883	1,638
Women's Handicrafts ... ..	5,672	5,772	4,072	5,002	6,092
Home Science ... ..	1,298	1,129	1,056	1,434	1,308
Correspondence ... ..	2,049	1,838	2,369	1,654	2,079
Sheep and Wool ... ..	1,440	1,425	1,254	1,236	1,257
Commercial ... ..	2,856	2,629	2,185	2,409	2,749
Trades Preparatory ... ..	436	488	336	213	104
Industrial Management ... ..	...	...	...	1,344	1,507
Miscellaneous ... ..	2,681	5,726	3,627	2,679	2,590
Total Individual Students	37,264	40,983	34,940	39,750	42,767

In 1945 trades courses occupied 43 per cent. of the students, and women's handicrafts 14 per cent. Between 1939 and 1945 the number of students in trades courses increased by 2,519 or 16 per cent., and those in diploma courses by 1,336 or 90 per cent.

#### *Commonwealth Reconstruction Training Scheme—Technical Type.*

A description of the Commonwealth Reconstruction Training Scheme is given on pages 901 to 903.

In New South Wales, technical-type training under the scheme is administered by the Director of Technical Education, who is also the Deputy Director of Industrial Training in the State; he is assisted by representative committees of employees and employers. Successful applicants receive full-time vocational and professional training at the Technical College, approved industrial establishments or private training institutions. Part-time training is provided at the Technical College or private institutions, either by attendance at classes or by correspondence. Full-time trainees receive a living allowance during the period of training.

From the inception of the scheme in March, 1944 to December, 1946, 17,966 applications (including 1,610 from females) were received for full-time technical-type training in New South Wales. Eighty-seven per cent. of the applicants had enlisted on or before their 21st birthday. At the end of 1946, 1,439 students had completed their training.

The number of persons in full-time training under the technical-type scheme in New South Wales was 69 in 1944, 598 in 1945 and 5,203 in 1946. Part-time trainees numbered 20,666 at the end of 1946. These figures include trainees taking refresher courses.

Full-time students in training at the end of 1946 comprised 4,245 at the Technical College (38 courses), 515 at industrial establishments (73 courses), and 443 at private institutions (15 courses). Part-time students numbered 16,622 at the Technical College (125 courses) and 4,044 at private institutions (100 courses). Of the total number of part-time students, 10,936 or 53 per cent. were being trained by correspondence.

The following statement shows particulars of students in training in the principal technical-type courses in December, 1946. Trainees in subsidised professional employment are not included.

TABLE 807.—Commonwealth Reconstruction Training Scheme in New South Wales—Technical-type Students and Courses, December, 1946.

Course.	Full-time Students.			Part-time Students.†		
	Technical College.	Other.	Total.	Technical College.	Private Institutions.	Total.
<b>Building Trades—</b>						
Bricklaying ... ..	530	...	530	44	...	44
Carpentry ... ..	1,234	...	1,234	656	1	657
Painting ... ..	427	...	427	37	...	37
Plastering ... ..	288	...	288	...	...	...
Plumbing ... ..	140	1	141	440	...	440
Other... ..	62	27	89	426	90	516
<b>Total, Building Trades ...</b>	<b>2,681</b>	<b>28</b>	<b>2,709</b>	<b>1,603</b>	<b>91</b>	<b>1,694</b>
<b>Other Courses—</b>						
Accountancy* ... ..	466	4	470	4,753	1,474	6,227
Art (including Commercial)..	95	...	95	278	9	287
Dressmaking ... ..	87	...	87	673	...	673
Matriculation ... ..	446	...	446	221	1	222
Shorthand and Typing ... ..	...	238	238	436	32	468
Woolclassing ... ..	61	1	62	720	...	720
Other... ..	409	687	1,096	7,938	2,437	10,375
<b>Total, All Courses ...</b>	<b>4,245</b>	<b>958</b>	<b>5,203</b>	<b>16,622</b>	<b>4,044</b>	<b>20,666</b>

\* Including 96 Diploma students. † Exclusive of professional students in subsidised employment (see page 936).

Building trades courses occupied 52 per cent. of the full-time trainees, but only 8 per cent. of the part-time students. Of the part-time students, 6,227 or 30 per cent. were studying accountancy. The full-time Technical College trainees included 652 diploma students of whom 446 were studying for matriculation.

Of the full-time students in December, 1946, 4,551 or 87 per cent. were vocational (or trades) trainees. After reaching a standard of proficiency

equal to an earning capacity of at least 40 per cent. (usually in 3 to 12 months), these trainees are placed in employment for further practical training. They receive award wages, and their employers are subsidised by the Commonwealth to the extent of the difference between the full wage and the trainee's standard of proficiency, which is assessed at three-monthly intervals. If satisfactory progress is not made, training benefits may be withdrawn. The average period of subsidised employment before the trainee is qualified to earn full wages is about 2½ years. Trainees in subsidised employment include a number receiving professional training partly in practice and partly at the Technical College. Trainees who had reached the necessary standard of proficiency before demobilisation are placed directly in subsidised employment.

In December, 1946, there were 3,001 trainees in subsidised employment, of whom 1,091 or 36 per cent. were in building trades and 873 or 29 per cent. in professional occupations. Of 2,128 employed in trades, 45 were women. The number of trainees in subsidised employment and their principal occupations are shown below:—

TABLE 808.—Commonwealth Reconstruction Training Scheme in New South Wales—Trainees in Subsidised Employment, December, 1946.

Occupation.	Trainees in Subsidised Employment.		
	Without Reconstruction Training.	After Reconstruction Training.	Total.
<b>Building Trades—</b>			
Bricklaying ... ..	9	121	130
Carpentry ... ..	42	529	571
Painting ... ..	14	105	119
Plumbing ... ..	17	177	194
Other... ..	9	68	77
<b>Total, Building Trades ... ..</b>	<b>91</b>	<b>1,000</b>	<b>1,091</b>
<b>Other Trades—</b>			
Butchering ... ..	181	7	188
Furniture Trades ... ..	51	72	123
Hairdressing... ..	32	29	61
Pastrycooking ... ..	94	2	96
Other... ..	287	282	569
<b>Total, Trades ... ..</b>	<b>736</b>	<b>1,392</b>	<b>2,128</b>
<b>Professional Occupations—</b>			
Accountancy ... ..	627	.....	627
Architecture ... ..	93	.....	93
Surveying ... ..	47	.....	47
Other... ..	106	.....	106
<b>Total, All Occupations ... ..</b>	<b>1,609</b>	<b>1,392</b>	<b>3,001</b>

Trainees in subsidised employment may continue their studies on a part-time basis.

Expenditure by the Commonwealth on technical-type reconstruction training in New South Wales includes subsidies to the State technical education authorities, fees and allowances to trainees and subsidies to employers. Expenditure on the scheme by the Technical Education Branch from Commonwealth subsidies was £9,300 in 1944, £62,333 in 1945 and £275,314 in 1946. Expenditure in 1946 included salaries, £208,060, maintenance, £51,223, and buildings and equipment, £16,031.

In the year ended 30th June, 1947, Commonwealth expenditure on fees and allowances to technical-type trainees in New South Wales was £1,192,732, and subsidies to employers, £397,899. In the previous year, the total expenditure on these items was £309,354.

#### *Institutes for Transport Employees.*

Classes for the technical, commercial and general education of railway employees are conducted by the Railways Institute, which is under the control of a director.

The headquarters of the institute are in Sydney, and there are branches in various parts of the State. The total membership, 31,437 at 30th June, 1946, embraces more than half the railway employees. Instruction is given in elementary railway principles and various subjects to the University matriculation standard. Correspondence courses are provided. The number of students was 8,383 at 30th June, 1946. The institute possesses a library of 146,969 volumes.

Educational and recreational facilities are provided by the Road Transport and Tramways Institute. The membership at 30th June, 1946, was 8,314 and 304 students were enrolled. There are 39,134 books in the twenty-one libraries of the institute.

#### UNIVERSITY OF SYDNEY.

The University of Sydney was incorporated by Act of Parliament on 1st October, 1850, and it was granted a Royal Charter on 27th February, 1858, when its graduates were accorded the same status in the British Empire as graduates of the Universities of the United Kingdom. Since 1884 women have been eligible for all University privileges.

Within the University there are ten faculties, viz., Arts, Law, Medicine, Science, Engineering, Dentistry, Veterinary Science, Agriculture, Architecture, and Economics. The Senate of the University may grant degrees in all branches of knowledge, and may admit *ad eundem gradum* graduates of approved Universities. Bachelor Degrees are awarded in all the faculties and Master or Doctor Degrees on completion of post-graduate studies in most faculties. Degrees, Bachelor and Doctor, may be awarded in Divinity. Diplomas are awarded in specified subjects. Particulars of the duration and cost of courses are shown on page 940.

Residential colleges established within the University grounds are Church of England (St. Paul's) 1854, Roman Catholic (St. John's) 1857 and (Sancta Sophia for women) 1929, Presbyterian (St. Andrew's), 1867, and Methodist (Wesley) 1910. There is also the Women's College (1889), which is conducted on an undenominational basis.

A Teachers' College not affiliated with the University is situated in the University grounds; it is non-residential and is maintained by the State for the training of teachers.

By arrangement with the Commonwealth Government, a School of Public Health and Tropical Medicine was established at the University in 1930 for the training of graduates and students and for research. The McMaster Animal Health Laboratory is also within the University grounds.

*New England University College.*

An Act was passed in 1937, giving the Senate power to establish University Colleges outside the metropolitan area. The first college, the New England University College, was established at Armidale in 1938. Courses are available for the B.A. and B.Sc. degrees and for the first year in veterinary science and agriculture.

Expenditure of the College (included in the University expenditure shown in Table 810) was £14,957 in 1939, £35,237 in 1945 and £42,831 in 1946. Students in attendance in 1946 numbered 117 males and 85 females.

The following text and tables relating to the University refer also to the New England University College unless otherwise stated.

*University Finances.*

The University is supported chiefly by Government aid, the fees paid by students, and income derived from the private foundations. Under the University and University Colleges Act, 1900-1937, the University receives a permanent endowment of £100,000 per annum from the State. This amount was supplemented by £50,000 in 1943-44 and in 1944-45, and the endowment was increased to £125,000 per annum as from 1st July, 1946. In addition, the State Treasurer pays to the University the amounts by which the expenditure of the New England University College exceeds its income; the amount was £26,192 in 1946. Other State grants, £16,673 in 1946, are made to the University for specific purposes.

The University receives grants from Commonwealth funds for administration of the Commonwealth Reconstruction Training Scheme, special research and other purposes. In 1946 Commonwealth grants amounted to £135,492, including £36,497 for research.

Many benefactions have been bestowed by private persons. These endowments include the Challis Fund, of which the original amount, £276,856, has been increased by investment to £404,373; the G. H. Bosch Fund, £268,929; the P. N. Russell Fund, £101,457; and the Fisher Estate, £43,407. In addition, the University receives a large annual revenue from the trustees of the McCaughey bequest. Excluding the principal of this bequest, the credit balances of the private foundations amounted to £1,641,690 on the 31st December, 1946.

The following statement shows the amounts derived from the principal sources of revenue and the total expenditure during each year since 1939:—

TABLE 809.—University\*—Classification of Receipts, 1939 to 1946.

Year.	Receipts.						Expenditure.
	Government Grants.	Special Research Grants.	Interest, Rent, Dividends and Donations.	Fees.	Other.	Total.	
	£	£	£	£	£	£	£
1939	115,530	14,164	70,243	97,999	17,425	315,361	304,704
1940	134,088	5,739	92,161	103,941	11,370	347,299	311,243
1941	127,481	18,204	85,739	106,756	12,343	350,523	343,887
1942	143,748	55,074	85,614	90,081	11,399	385,916	352,247
1943	128,926	54,411	88,852	103,120	12,307	387,616	358,386
1944	207,551	43,291	97,198	109,355	13,971	471,366	383,873
1945	181,441	43,015	96,804	140,447	16,424	478,131	462,195
1946	241,860	36,497	98,849	260,521	21,428	659,155	645,744

\* Includes New England College.



Between 1939 and 1946 total receipts increased by £343,794 or 113 per cent. The receipts in 1946 were £181,024, or 38 per cent. greater than in 1945, owing largely to increases in students under the Commonwealth Reconstruction Training Scheme. In 1946, fees comprised 39.5 per cent. of the total receipts, Government grants (excluding special research grants) 36.7 per cent., and other items 23.8 per cent. The grants for research are provided by various Commonwealth authorities. Fees paid by the Commonwealth on behalf of reconstruction trainees and students receiving financial assistance are included in the total receipts from fees.

Expenditure has increased since 1939 under all heads, except special grants. In 1946 expenditure on administration, teaching departments and special research was more than double the amount in 1939. The expenditure, excluding capital items, in each year since 1939 was distributed as follows:—

TABLE 810.—University\*—Classification of Expenditure, 1939 to 1946.

Year.	Admin- istration.	Teaching Depart- ments.	Libraries.	Main- tenance of Propert- ies.	Special Grants.	Special Research.	Adult Edu- cation.	Other Items.	Total.
	£	£	£	£	£	£	£	£	£
1939	21,674	195,407	8,964	24,813	11,689	14,436	5,862	21,859	304,704
1940	23,393	200,766	9,901	20,186	5,103	14,164	4,645	33,085	311,243
1941	26,313	201,857	11,010	23,851	13,660	24,520	5,302	37,374	343,887
1942	26,192	198,075	9,867	23,219	2,915	55,462	4,941	31,576	352,247
1943	24,814	206,729	9,693	23,604	2,641	56,590	5,815	28,500	358,386
1944	27,191	226,193	10,595	25,348	4,169	41,437	9,065	39,875	383,873
1945	31,625	279,675	11,943	24,898	5,681	43,550	11,420	53,403	462,195
1946	45,958	402,880	14,141	39,620	6,517	40,564	10,852	85,212	645,744

\* Includes New England College.

The amount expended on new buildings and repairs was £13,169 in 1944, £70,065 in 1945, and £161,775 in 1946.

#### *University Courses, Staff and Students.*

Before admission to courses of study leading to degrees, students must furnish proof of educational qualifications by passing in prescribed subjects at the leaving certificate or matriculation examination. Non-matriculated students are admitted to lectures and to laboratory practice in certain faculties, but are not eligible for degrees. On the satisfactory completion of any course, however, they may be awarded a certificate. Lectures are delivered during the daytime in all subjects necessary for degrees and diplomas, and evening lectures are provided in the faculties of Arts and Economics. Students are required to attend at least ninety per cent. of the lectures in each course of study leading to a degree.

Lectures are delivered during three terms in each year. The period of study and cost of graduation vary according to the faculty and, in 1946, ranged from three years and £95 8s. in Arts to six years and £300 16s. in Medicine. In addition to lecture fees there is a matriculation fee of £3 and a degree fee ranging from £3 to £10 according to the faculty. A general service fee ranging from £2 2s. to £6 6s. per annum is imposed on all students attending lectures, including students exempt from payment of ordinary fees.

The principal diploma courses and the term of study and the cost of each are as follows: Education, one year, £32 1s.; Social Studies, two years, £65 12s.; Pharmaceutical Science, three years, £60 10s. There are short-term post-graduate courses in special branches of Medicine. Diploma courses in Commerce and Public Administration were discontinued in 1943 and 1945 respectively.

In 1946 the teaching staff of the University (including the New England University College) comprised 326 full-time and 291 part-time professors, lecturers and demonstrators.

Particulars of scholarships and bursaries at the University are given on page 927. Students assisted include reconstruction trainees and those aided by the Universities Commission (see pages 943 and 944.) In 1946 students receiving State or Commonwealth assistance, or both, numbered 5,157 and those assisted by the University, 301. Some students receive more than one form of assistance; the number of individual students in receipt of assistance was 2,105 in 1945 and 4,680 in 1946.

The following statement shows the number of students in the various faculties at the University and New England University College in each year since 1941. Service personnel enrolled under the Services Education Scheme are not included; these students numbered 1,072 in 1945.

TABLE 811.—University—Students Enrolled in Courses, 1941 to 1946.

Course.	Number of Students.							
	1941.	1942.	1943.	1944.	1945.	1946.		
						Males.	Females	Total.
<b>Bachelor Degree—</b>								
Arts ... ..	759	544	619	704	987	958	854	1,812
Divinity ... ..	3	1	3	5	6	14	...	14
Law ... ..	216	72	59	92	161	560	28	588
Economics ... ..	358	181	209	240	290	679	97	776
Science ... ..	475	445	505	519	673	695	280	975
Medicine ... ..	1,015	1,011	957	972	1,159	1,302	300	1,602
Engineering ... ..	306	274	275	322	436	833	1	834
Agriculture ... ..	73	55	51	78	128	176	24	200
Veterinary Science ... ..	149	94	87	116	190	286	30	316
Dentistry ... ..	184	164	185	205	272	433	44	477
Architecture ... ..	34	16	21	39	79	131	31	162
<b>Diploma (Post-Graduate)—</b>								
Anthropology ... ..	...	...	2	1	...	3	1	4
Education ... ..	73	71	53	55	78	53	50	103
Medicine ... ..	5	7	...	5	4	82	6	88
<b>Diploma (Sub-Graduate)—</b>								
Commerce ... ..	60	12	11	8	5	19	...	19
Public Administration ... ..	49	21	20	34	46	54	3	57
Social Studies ... ..	50	26	53	88	160	29	123	152
Massage ... ..	42	62	50	75	41	1	72	73
Pharmacy ... ..	141	115	103	117	125	132	103	240
<b>Miscellaneous (Odd Subjects)</b>	155	82	154	204	212	177	125	302
<b>Total ... ..</b>	<b>4,165</b>	<b>3,253</b>	<b>3,417</b>	<b>3,879</b>	<b>5,052</b>	<b>6,617</b>	<b>2,177</b>	<b>8,794</b>

The particulars in the foregoing table include students who were attending more than one course. The number of individual students (excluding service personnel) enrolled in various years since 1921 is shown below:—

TABLE 812.—University—Individual Students, 1921 to 1946.\*

Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1921 ...	2,506	769	3,275	1940 ...	2,941	979	3,920
1929 ...	1,815	705	2,520	1941 ...	2,904	1,171	4,165
1931 ...	2,269	850	3,119	1942 ...	2,166	1,087	3,253
1936 ...	2,524	682	3,206	1943 ...	2,113	1,292	3,405
1937 ...	2,617	761	3,378	1944 ...	2,364	1,497	3,861
1938 ...	2,716	834	3,550	1945 ...	3,271	1,717	4,988
1939 ...	2,864	972	3,836	1946 ...	6,556	2,155	8,711

\* Post-graduate students not included prior to 1939.

Disregarding the war years, the proportion of women students has remained relatively constant since 1921 at somewhat less than 30 per cent. of the total. The proportion in 1946 was 24.7 per cent.

In 1941 the number of students, viz., 4,165, was the highest recorded to that date, but there was a sharp decline to 3,253 in the following year owing to the wartime quota system of enrolment. As a result of the enrolment of reconstruction trainees and the relaxation of wartime restrictions there was a steep increase in 1945 and 1946. In the latter year, the number of students, 8,711, was more than double the number in 1941.

Particulars of students enrolled in 1939, 1945 and 1946, according to sex and age, are shown below. Students aged 25 years or over comprised 13 per cent. of the total in 1939 and 21 per cent. in 1946. The increase may be attributed to the enrolment of reconstruction trainees; there were 2,802 such students in 1946, including 919 aged 25 years or over.

TABLE 813.—University—Sex and Age of Students, 1939, 1945 and 1946.

Age (Years).	1939.			1945.			1946.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
16 ...	80	34	114	182	116	298	146	88	234
17 ...	283	144	427	572	305	877	625	359	984
18 ...	466	185	651	552	275	827	787	439	1,226
19 ...	374	153	527	441	299	740	742	324	1,066
20 ...	388	147	535	291	214	505	689	274	963
21 ...	341	86	427	293	134	427	577	143	720
22 ...	286	68	354	208	90	298	571	112	683
23 ...	188	25	213	148	45	193	504	79	583
24 ...	126	25	151	98	29	127	400	54	454
25 and over ...	392	105	497	486	210	696	1,515	283	1,798
Total ...	2,864	972	3,836	3,271	1,717	4,988	6,556	2,155	8,711

Students admitted to matriculation numbered 1,107 in 1944, 1,666 in 1945, and 3,744 in 1946; these figures include students at the New England University College but do not include service personnel enrolled under the Services Education Scheme.

Degrees conferred by the Senate of the University numbered 853 in 1939, but declined during the war years owing to the restrictions on enrolments and the interruption or postponement of studies for war service. In 1946 the number conferred, viz., 876, was the highest on record, and

represented an increase of 207 or 31 per cent. as compared with 1945. Particulars of degrees conferred in 1939 and in each year from 1942 to 1946 are given below:—

TABLE 814.—University of Sydney\*—Degrees Conferred, 1939 to 1946.

Degree.	Degrees Conferred.							
	1939.	1942.	1943.	1944.	1945.	1946.		
						Males.	Females.	Total.
<b>Arts—</b>								
D.Litt. ... ..	...	...	...	2	...	...	...	...
M.A. ... ..	17	9	11	8	18	16	5	21
B.A. ... ..	139	204	110	129	127	59	117	176
<b>Divinity—</b>								
B.D. ... ..	...	3	...	...	2	...	...	...
<b>Law—</b>								
LL.B. ... ..	40	44	18	16	12	28	4	32
<b>Economics—</b>								
M.Ec. ... ..	1	1	...	1	1	1	...	1
B.Ec. ... ..	63	53	37	33	20	24	7	31
<b>Science—</b>								
D.Sc. ... ..	3	1	1	1	1	3	...	3
M.Sc. ... ..	10	7	9	6	6	9	2	11
B.Sc. ... ..	62	101	101	125	107	95	64	159
B.Sc.For. ... ..	...	...	1	4	3	3	...	3
<b>Medicine—</b>								
M.D. ... ..	2	1	1	1	1	...	...	...
M.S. ... ..	7	...	...	4	6	4	...	4
Ch.M. ... ..	2	...	...	4	3	...	...	...
M.B. ... ..	210	155	149	134	151	118	34	152
B.S. ... ..	185	136	143	135	150	125	33	158
<b>Engineering—</b>								
M.E. ... ..	1	...	...	...	1	1	...	1
B.E. ... ..	35	36	56	88	2	69	...	69
<b>Agriculture—</b>								
D.Sc.Agr. ... ..	1	...	...	...	...	...	...	...
M.Sc.Agr. ... ..	...	...	...	...	...	1	...	1
B.Sc.Agr. ... ..	15	6	13	5	9	10	4	14
<b>Veterinary Science—</b>								
B.V.Sc. ... ..	27	19	16	11	18	14	3	17
<b>Dentistry—</b>								
D.D.Sc. ... ..	...	...	1	...	2	1	...	1
M.D.S. ... ..	2	2	2	2	2	3	...	3
B.D.S. ... ..	27	34	41	41	22	15	2	17
<b>Architecture—</b>								
B.Arch. ... ..	4	2	3	4	5	1	1	2
<b>Total</b> ... ..	853	814	713	754	669	600	276	876

\*Includes New England University College.

More degrees are conferred in the School of Medicine than in any other faculty, the number in 1946 being 314 or 36 per cent. of the total. In order to qualify for registration as medical practitioners, students must complete a course of six years, which leads to two degrees, viz., M.B. (Bachelor of Medicine) and B.S. (Bachelor of Surgery). In 1946, degrees in Arts and Science comprised 22 per cent. and 20 per cent. respectively of the total conferred. Few degrees are conferred in Architecture.

Degrees conferred on women in 1946 numbered 276 or 32 per cent. of the total, as compared with 172 or 20 per cent. of the total in 1939. In 1946, partly as a result of the wartime decline in the enrolment of men in the non-technical faculties, twice as many women as men received the degree of Bachelor of Arts (B.A.); in the case of all other degrees men predominated. Degrees were conferred on women in all schools except Engineering and Divinity.

In 1946 the Senate granted 108 post-graduate and 46 sub-graduate diplomas, as compared with 44 and 38 respectively in 1945.

*Wartime Enrolment and Assistance to University Students.*

From 1942 to 1945 the enrolment of students in Australian Universities was controlled in terms of National Security Regulations. The number of admissions to the various faculties was restricted and students were admitted in order of merit at approved examinations. In 1943 the Commonwealth Government introduced a scheme of financial assistance to students through the Universities Commission, constituted in February of that year. Particulars regarding these wartime arrangements were published at page 228 of the 1941-42 and 1942-43 edition of the Year Book.

*The (Commonwealth) Universities Commission.*

Permanent status was given to the Universities Commission by the Commonwealth Education Act, 1945. Under this Act the Commission is required to make arrangements for the training of discharged members of the Forces as provided by the Re-establishment and Employment Act, to assist other persons to obtain training in universities or similar institutions, and to advise the Minister in regard to university training and associated matters.

Restrictions on enrolment in all faculties were removed in 1946, but the system of financial assistance is to continue for at least five years from the cessation of hostilities. A quota of assisted full-time students is fixed each year for the various faculties in each University, and in New South Wales the quota of applicants is selected in order of merit at the Leaving Certificate and Matriculation examinations. The quota for Sydney University in 1946 was 270, distributed as follows: Medicine 50, Science 50, Engineering 35, Dentistry, Veterinary Science and Agriculture 55, other faculties 80. A full-time course is one which the University considers to be a reasonable full-time activity.

An applicant for assistance must not be more than 21 years of age, and must guarantee, if selected, to continue his studies till graduation, not to accept employment during terms and to undertake national service, if required, for at least three years after graduation. An exception in regard to the age limit is made in the case of Social Studies diploma students.

Students assisted financially must satisfy a means test. The maximum amount of assistance payable (as in December, 1946), where the adjusted family income does not exceed £250, is £104 per annum if living with a parent, or £143 if living away from home, the payment of University fees and an allowance of £10 toward cost of books and equipment. The adjusted family income is taken as the taxable income of the student and his parents, less £50 for each dependent child (other than the student) under 16 years of age. The amount of assistance is reduced by £5 4s. for every £10 by which the adjusted family income is exceeded, and by the monetary equivalent of any scholarship, etc., held by the student.

Reconstruction trainees receive higher allowances (see page 902) and are not subject to a means test. The Universities Commission controls and assists their training in professional-type courses (both full-time and part-time) at universities and at other governmental and private institutions. At the end of 1946 there were 1,549 full-time trainees (in receipt of living allowances) studying professional-type courses in New South Wales at

institutions other than the University; they included 242 being trained in nursing, 249 (at the Teachers' Colleges) being trained as teachers, 161 studying theology and 146 (mainly at the Conservatorium) studying music. Part-time trainees in professional-type courses numbered 1,509, including 529 at the University.

There is provision for a limited amount of oversea training of reconstruction students, and 16 trainees were selected from New South Wales for this purpose in 1946.

Enrolments of financially-assisted students and reconstruction trainees at Sydney University (including the New England University College) in each year 1943 to 1946 are shown below. The reconstruction trainees include a proportion taking refresher courses.

TABLE 815.—University of Sydney—Students assisted by Commonwealth, 1943 to 1946.

Course.	Students Assisted Financially.				Reconstruction Trainees.		
	1943.	1944.	1945.	1946.	1944.	1945.	1946.
Arts ... ..	29	9	9	53	8	66	519
Law ... ..	3	4	3	8	7	60	387
Economics ... ..	13	11	13	14	7	38	317
Science ... ..	181	177	191	157	3	34	236
Medicine ... ..	227	246	244	237	14	58	316
Engineering ... ..	104	103	123	113	6	36	370
Agriculture ... ..	21	27	33	39	4	8	79
Veterinary Science	31	43	52	35	4	27	99
Dentistry ... ..	62	62	66	77	5	25	249
Architecture ... ..	1	7	9	17	4	23	87
Other Courses ... ..	...	10	16	11	11	22	143
Total ... ..	672	699	759	761	73	397	2,802

In 1946 assisted students comprised 8.7 per cent. and reconstruction trainees 32.2 per cent. of the total enrolment at the University. The 2,802 reconstruction trainees in 1946, of whom 110 were women, included 2,273 full-time students in receipt of living allowances.

Commonwealth expenditure on fees and allowances to financially-assisted students in New South Wales was £80,383 in 1945 and £84,062 in 1946.

Expenditure on university-type training of reconstruction students in New South Wales at the University and other institutions was £154,173 in 1945 and £854,622 in 1946. The greater part of these amounts consisted of fees and allowances to students.

#### *University Clinics.*

Three metropolitan hospitals, viz., Royal Prince Alfred, St. Vincent's and Sydney, provide clinical schools for students in medicine who are required to attend at these institutions for clinical lectures, training and practice during the fourth, fifth, and sixth years of the medical course.

At the Royal Alexandra Hospital for Children provision is made for systematic instruction of medical students in diseases of children.

Clinical training and practice in obstetrics is provided at the Royal Hospital for Women (Paddington) and the Women's Hospital (Crown-street).

In connection with the Faculty of Dentistry, the Dental Hospital of Sydney provides facilities for the instruction of students. The University lecturers in surgical and mechanical dentistry are, *ex officio*, honorary dental surgeons of the hospital.

#### *University Extension Lectures.*

University Extension Lectures are conducted under the direction of a University Extension Board of twelve to eighteen members appointed annually by the Senate. Courses of lectures upon topics of literary, historical, and scientific interest are given in various centres at a charge of £2 per course. Regular classes in various foreign languages are also held at the University. At the conclusion of a systematic course of ten lectures, an examination may be held and certificates awarded to successful candidates. Lectures were delivered in Sydney and various country towns during 1946. The cost of Extension Board classes was £3,218 in 1945 and £4,457 in 1946.

#### *Tutorial Classes.*

In conjunction with the Workers' Educational Association, the Senate has established evening tutorial classes in particular branches of study at the University and in suburban and country centres. A resident tutor is stationed at Newcastle. Reference is made to the Workers' Educational Association on page 948. A sum of £14,689 was expended upon the maintenance of tutorial classes during 1945 and £16,108 in 1946.

#### *University Appointments Board.*

The University Appointments Board assists graduates and undergraduates to obtain employment.

### STATE EXPENDITURE ON EDUCATION.

#### *Public Schools.*

The following statement provides a comparison of the State expenditure on schools at intervals since 1901. The expenditure on technical education is not included. The basis used for calculating costs per pupil is the average weekly enrolment.

TABLE 816.—Expenditure on Public Schools, 1921 to 1946.

Year.	Average Weekly Enrolment.*	Expenditure.			Per Pupil—Average Weekly Enrolment.					
		Maintenance and Administration.	School Premises.	Total.	Maintenance and Administration.	School Premises.	Total Expenditure.			
		£	£	£	£ s. d.	£ s. d.	£ s. d.			
1921	295,961	3,229,042	329,795	3,558,837	10 18 3	1 2 3	12 0 6			
1929	352,071	4,207,754	846,625	5,054,379	11 19 0	2 8 1	14 7 1			
1931	371,842	3,823,684	415,379	4,239,063	10 5 8	1 2 4	11 8 0			
1941	335,787	4,712,545	460,795	5,173,340	14 0 8	1 7 6	15 8 2			
1942	327,264	4,807,540	471,167	5,278,707	14 13 10	1 8 9	16 2 7			
1943	334,708	5,006,711	362,596	5,369,307	14 19 2	1 1 8	16 0 10			
1944	337,457	5,172,967	409,483	5,582,450	15 6 7	1 4 3	16 10 19			
1945	337,581	5,429,045	425,397	5,854,442	16 1 8	1 5 2	17 6 10			
1946	339,370	6,192,600	569,660	6,762,260	18 4 11	1 13 7	19 18 6			

\* Inclusive of Evening Youth Colleges.

The annual expenditure on maintenance and administration increased by £1,480,055 or 31.4 per cent. between 1941 and 1946. In the same period the average weekly enrolment, which had declined temporarily in 1942, increased by only 3,583 or 1.1 per cent.

The average expenditure per pupil rose by 16s. in 1945 and further by £2 11s. 8d. in 1946. The expenditure per pupil in 1946, viz., £19 18s. 6d., was the highest recorded to that date.

The following statement shows the distribution of expenditure, including capital expenditure, in connection with public primary and secondary schools (but omitting expenditure on technical education) in 1939 and each of the last four years.

TABLE 817.—Dissection of Expenditure on Public Schools, 1939 to 1946.

Particulars.	1939.	1943.	1944.	1945.	1946.
<b>Sites, Buildings, Additions, Remodelling,</b>					
Repairs, Furniture—	£	£	£	£	£
Primary and Super-Primary Schools ...	281,603	285,956	316,970	336,961	426,288
Secondary Schools ...	102,281	37,500	43,185	42,148	89,359
Teachers' Colleges ...	4,429	7,276	3,942	3,139	13,594
National Fitness Camps ...	...	...	5,630	4,871	3,820
	388,313	330,732	369,727	387,119	533,061
<b>Maintenance of Schools—</b>					
Salaries and Allowances—					
Primary Schools ...	3,150,839	3,325,926	3,374,784	3,363,529	3,585,138
Secondary Schools ...	718,580	876,799	938,669	1,096,461	1,492,758
Evening Youth Colleges ...	11,348	6,675	6,272	5,800	10,846
Other Maintenance Expenses—					
Primary Schools ...	242,882	294,602	294,203	310,192	316,170
Secondary Schools ...	58,243	74,746	80,464	100,043	108,285
Evening Youth Colleges ...	617	340	293	247	479
	4,182,509	4,579,088	4,694,635	4,876,272	5,513,675
<b>Bursaries and Scholarships ...</b>	34,172	45,330	48,015	55,497	61,044
<b>Conveyance Subsidies ...</b>	24,860	20,219	20,799	27,374	59,669
<b>Training of Teachers ...</b>	133,581	103,100	135,398	163,123	243,687
<b>School Medical Inspection ...</b>	35,751	34,669	35,698	36,586	18,808*
<b>School Inspection and Administration ...</b>	132,568	148,211	155,487	169,015	196,229
<b>Provision of Milk for School Children ...</b>	...	48,583	55,911	66,010	72,312
	360,941	400,121	451,308	522,605	651,749
<b>Total—Department of Education ...</b>	4,931,763	5,309,941	5,515,670	5,785,996	6,698,485
<b>Rates—Water and Sewerage, Municipal and</b>					
Shire ...	27,886	31,864	39,756	38,278	36,599
Other ...	27,080	27,502	27,024	30,168	27,176
<b>Grand Total ...</b>	£ 4,986,679	5,369,307	5,582,450	5,854,442	6,762,260

\* January to June; subsequent payments by Department of Public Health.



*Capital Expenditure on Public School Buildings, etc.*

Large sums have been expended for the purpose of building new schools, technical colleges, etc. The total amount so expended in each year 1926-27 to 1945-46 was as follows:—

TABLE 818.—Capital Expenditure on Public Schools and Technical Colleges.  
1926-27 to 1945-46.

Year ended June.	Amount.	Year ended June.	Amount.	Year ended June.	Amount.	Year ended June.	Amount.
	£		£		£		£
1927	653,047	1932	91,438	1937	220,985	1942	258,444
1928	769,943	1933	135,824	1938	374,720	1943	117,716
1929	788,701	1934	238,041	1939	422,287	1944	167,748
1930	400,323	1935	216,294	1940	380,747	1945	85,573
1931	335,647	1936	229,704	1941	218,104	1946	199,994

This expenditure was met from loan funds with the exception of £180,257 in 1930-31, £48,314 in 1931-32 £1,408 in 1939-40 and £46,561 in 1940-41 from the Unemployment Relief Fund.

*Total State Expenditure on Education.*

In addition to expenses incurred in respect of the public school system, expenditure on education by the State of New South Wales includes grants and subsidies to the University and other educational and scientific organisations. A summary of the total expenditure by the State in respect of education (including technical education) in various years since 1921 is shown below. The expenditure on buildings, equipment, sites, etc., representing capital expenditure, is distinguished as far as practicable from expenditure for maintenance, including grants and subsidies which may be regarded as annual costs.

TABLE 819.—State Expenditure on Education, 1920-21 to 1945-46.

Year ended 30th June.	Expenditure.			
	Capital.	Annual.	Total.	Per Head of Population.
	£	£	£	£ s. d.
1921 ... ..	251,880	3,473,545	3,725,425	1 15 8
1929 ... ..	791,041	4,911,861	5,702,902	2 5 11
1931 ... ..	342,258	4,504,392	4,846,650	1 18 1
1939 ... ..	433,099	5,364,801	5,797,900	2 2 5
1940 ... ..	415,489	5,372,953	5,788,442	2 1 11
1941 ... ..	244,588	5,538,242	5,782,830	2 1 10
1942 ... ..	302,163	5,799,728	6,101,891	2 3 7
1943 ... ..	120,276	6,030,539	6,150,815	2 3 5
1944 ... ..	169,120	6,292,174	6,461,294	2 5 3
1945 ... ..	88,783	6,551,562	6,640,345	2 6 0
1946 ... ..	203,593	7,054,760	7,258,353	2 9 10

These figures are inclusive of amounts spent by the State on the Hawkesbury Agricultural College and experiment farms and societies for the

promotion of agricultural and allied interests. They exclude the interest on loan moneys expended on works used for education.

#### EDUCATIONAL AND SCIENTIFIC SOCIETIES.

Many organisations are in existence in New South Wales which have for their objective the encouragement of professional interests, and the advancement of science, art, and literature.

The learned professions such as solicitors and barristers, engineers, surveyors, architects, chemists, physicians and surgeons, dentists and optometrists are represented by institutes, associations or societies.

#### *Workers' Educational Association.*

The Workers' Educational Association of New South Wales was founded at a conference called by the Labour Council of New South Wales in June, 1913. It organises tutorial classes, discussion groups, study circles, summer and holiday schools and public lectures. In 1946 the membership of the association consisted of 882 individual members and 50 organisations other than tutorial classes affiliated with it.

In 1946, 97 tutorial classes were held, including 57 in Sydney and suburbs, 35 in the Newcastle district, and five in country towns. The number of students enrolled was 2,942. One hundred and seven discussion groups were organised in various centres during the year; the gross enrolment was 1,412 and the effective attendance 1,068.

The income of the association in 1946 was £8,730, including grants from the State, £4,747, and subscriptions and fees, £1,548.

#### CONSERVATORIUM OF MUSIC.

The Conservatorium of Music, which was established by the State in 1915, provides tuition in music, from elementary to advanced stages. The studies are divided into two sections. The music school section provides tuition in theory and practice leading to annual examinations in five grades and the issue of certificates to successful students. On passing the examination at the highest grade, the student may be admitted to the diploma section, in which a course of two years' tuition, leading to the professional diploma, is given under the personal direction of the Director of the Conservatorium. A preparatory theoretical course is available for juveniles and an opera school was opened in February, 1935. Training is provided also in chamber and orchestral music.

The number of students enrolled in the various courses of study at the Conservatorium was 2,430 in 1946, as compared with 2,350 in 1945. In 1946 seven students gained the Conservatorium diploma. Receipts in this year consisted of fees, proceeds from concerts, etc., amounting to £47,382, and the expenditure was £55,223.

#### MUSEUMS, LIBRARIES, AND ART GALLERY.

The Government of New South Wales maintains a number of museums and libraries and a National Art Gallery. The capital expenditure by the State on buildings for these institutions to 30th June, 1946, amounted to £636,400, including the capital cost of the Public Library, £357,247.

*Museums.*

The Australian Museum in Sydney is the oldest institution of its kind in Australia. It is incorporated under the control of trustees, with a statutory endowment of £1,000 per year, which is supplemented by annual Parliamentary appropriations. It contains fine specimens of the principal objects of natural history and a valuable collection of zoological, mineral and ethnological specimens. A library containing 32,184 volumes at 31st December, 1946, is attached to the institution. Lectures and gallery demonstrations are given in the Museum and are open to the public. During the year 1946, visitors to the Museum numbered 197,824, as compared with 249,257 in 1945. The expenditure was £17,377 in 1945 and £17,542 in 1946.

There is a Museum of Technology and Applied Science in Sydney, administered by a Board of Trustees under the Minister for Education. Prior to 1st July, 1946, this Museum was administered as an adjunct to the Sydney Technical College. It contains a valuable series of specimens illustrative of various stages of manufacturing, and a collection of natural products. The scientific staff conducts research work in connection with the development of the natural resources of Australia. Technological museums are established also at Goulburn, Bathurst, West Maitland, Broken Hill and Albury.

There is a Mining and Geological Museum attached to the Department of Mines. Its functions include the preparation and collection of minerals to be used as teaching aids in schools and in other institutions.

The Agricultural and Forestry Museum is an adjunct to the Department of Agriculture.

The public have access to the "Nicholson" Museum of Antiquities, the "Macleay" Museum of Natural History, the Museum of Normal and Morbid Anatomy, attached to the Sydney University, and the National Herbarium and Botanical Museum at the Botanic Gardens. Housed in the Macleay Museum is the Aldridge collection of Broken Hill minerals.

*Public Library of New South Wales.*

The Australian Subscription Library, established in 1826, became a State institution in 1869. It was incorporated in 1899, as the Public Library of New South Wales, with a body of trustees and an annual statutory endowment of £2,000, which is supplemented by Parliamentary appropriations.

The library embraces a General Reference Library, a Country Circulation Department, the Mitchell Library and the William Dixon Gallery, all housed in a new building completed in June, 1942. The General Reference Library contained 291,999 volumes, exclusive of pamphlets, at 30th June, 1946. The Country Circulation Department sends books to rural schools, agricultural bureaux, libraries operating under the Library Act, 1939, schools of arts and similar institutions, as well as to individual students; it contains 110,935 volumes. The library includes a research department which collects bibliographical references mainly of a scientific and technical nature, and a school where librarians are trained for the Public and other libraries.

In 1898 the late David Scott Mitchell promised the trustees of the Public Library a collection of 60,000 volumes dealing principally with Australasia

and the Southern Pacific, together with manuscripts and pictures. With these he bequeathed £70,000, and the income from the bequest is spent on additions. In June, 1946, there were 143,590 volumes in the Mitchell Library.

Sir William Dixson has given a unique collection of pictures and prints relating to Australian history to the Public Library. This collection forms the William Dixson Gallery.

The new building cost £357,247 to 30th June, 1946, and expenditure on maintenance during 1945-46 amounted to £45,391, including £9,786 for books and periodicals.

The library staff comprised 31 males and 68 females at 30th June, 1946. The average number of seated readers during the year ended 30th June, 1946, was estimated at 177 on week-days, 362 on Sundays and 265 on holidays.

#### *Sydney University Library.*

The library of the University of Sydney is the Fisher Library, named after its principal benefactor, Thomas Fisher, from whom a bequest of £30,000 was received in 1885. The library contained 292,793 volumes at 31st December, 1946. The Fisher Library is primarily for the use of the University, but may be used by other students. There is a medical branch and other departmental sections and a fine collection of periodicals, especially scientific publications, and valuable old books and manuscripts. The Reading Room, with 18,000 volumes on the open access system, can accommodate 300 students.

#### *Sydney Municipal Library.*

The Sydney Municipal Library is a free lending library administered by the Council of the City of Sydney. It contained 67,519 volumes (of which 6,951 were classified as fiction) in 1946. In that year 450,415 books were lent, equal to 1,501 daily, compared with 484,904 (1,684 daily) in 1945.

Maintenance costs amounted to £13,717 (including £1,830 for new books) in 1945, and £16,208 (including £2,498 for new books) in 1946.

#### *Public Library Services under Library Act, 1939.*

The Library Act, 1939, provides for the payment of State subsidies in respect of libraries maintained by municipal and shire councils and for the appointment of a Library Board to administer the Act and to assist in the organisation of local library services. The subsidy provisions of the Act were proclaimed as from 1st January, 1944, and the Library Board of New South Wales was constituted during that year. The Principal Librarian of the Public Library is executive member of the Board and acts for the local libraries in the purchase and processing of books. Librarians are trained in a school conducted by the Public Library. The Country Circulation department of the Public Library has been expanded to facilitate service to the new libraries.

Local authorities which adopt the Act are entitled to State subsidy provided that they administer a library service which is free to all residents (except that a charge may be made for works of fiction), and that they expend from rates at least 2s. per head of population per annum. The maximum amount of State subsidy is 1s. per head per annum.

At 30th June, 1947, sixty councils had adopted the Act, and 47 libraries were in operation, viz., 8 in Sydney and suburbs, 1 in Newcastle and 38 in other localities. The staff numbered 89. In 1946-47 the Board expended £24,160, including subsidies to councils £21,905, and the aggregate amount contributed by the councils towards the upkeep of the libraries was £56,452. In 1945-46, expenditure by the Board was £10,775 including £8,660 for subsidies.

#### *Children's Library Movement.*

The Children's Library Movement, which commenced operations in 1924, has established twenty free libraries and centres and a travelling library; the total number of books was approximately 40,000 in 1946. Books may be borrowed or used at the centres, and facilities are provided for arts and crafts. The funds of the movement are derived mainly from private sources and are supplemented by an annual grant of £1,000 from the State Government.

#### *Other Libraries.*

Local libraries established in a large number of centres throughout the State, may be classed broadly under two heads—Schools of Arts, which are organised and controlled by committees of private citizens and dependent upon the monetary support accorded by the public; and free libraries established by municipalities or shires. Under the provisions of the Local Government Act any shire or municipality may establish a public library, art gallery, or museum. Subject to certain conditions, libraries operated by municipalities and shires are entitled to State subsidy under the Library Act, 1939 (see above).

The library of the Australian Museum, though intended primarily as a scientific library for staff use, is accessible to students. It contains 32,184 volumes. In the library attached to the National Herbarium there are approximately 10,000 volumes.

The Library of the Central Technical College, Sydney, contains 24,000 volumes, and the Museum of Technology and Applied Science 7,000 volumes. There are 75,000 volumes in the libraries of the Teachers' Colleges and 766,000 in 1854 libraries attached to public schools.

The Parliamentary Library contains 95,990 books, and large numbers of volumes are in the libraries of the law courts and Government offices.

#### *National Art Gallery of New South Wales.*

The National Art Gallery contains a number of oil paintings, water colours, and statuary, including some works of prominent modern artists, and some valuable gifts from private persons.

The present value of the contents of the Gallery is approximately £245,730 and the cost of the building to 30th June, 1946, was £96,004.

The number of paintings, etc., in the Gallery at the end of 1946 was 4,491, viz., 954 oil paintings, 606 water-colours, 1,655 black-and-white works, 226 statuary casts and bronzes, and 1,050 other works of art, and the total amount expended during the year in purchasing works of art was £7,358. One hundred and thirty-nine works of art were acquired by purchase during the year, and 50 by gift.

The total expenditure during 1946 amounted to £16,934, including salaries and wages £5,707. In 1945 expenditure amounted to £17,380, of which £4,421 was paid in salaries and wages.

The attendance at the National Art Gallery during 1946 was 123,300 on week-days and 65,300 on Sundays. Attendances in 1945 were 158,760 and 83,570 respectively.

Art students, under certain regulations, may copy works and enjoy the benefit of a collection of books of reference on art subjects. Collections of pictures are sent to the principal country towns for temporary exhibition, 16 pictures being so distributed during 1946; also 200 works of art were lent to various Government departments and institutions in the city and suburbs.

## LAW COURTS.

A cardinal principle of the legal system of New South Wales, like that of England on which it is based, is the supremacy of the law, to which all persons are bound to conform. No person may be punished except for a breach of law which has been proved in due course of law in a court before which all persons have equal rights. It excludes the existence of arbitrariness or prerogative on the part of the government or of any exemption of officials or others from obedience to the ordinary law or from the jurisdiction of the ordinary tribunals.

### SOURCES OF LAW.

The law in force in New South Wales consists of—

- (i) So much of the common law of England and such English statute law as came into force on the original settlement of the colony in 1788, or was made applicable by the New South Wales Constitution Act passed in 1828.
- (ii) Acts passed by the Parliament of the State of New South Wales, together with regulations, rules, orders, etc., made thereunder.
- (iii) Acts passed by the Parliament of the Commonwealth of Australia within the scope of its allotted powers, together with regulations, rules, orders, etc., made thereunder.
- (iv) Imperial law binding New South Wales as part of the British Empire, as part of the Commonwealth of Australia, or as a State—subject, since 1931, to the Statute of Westminster. (These relate mainly to external affairs or matters of Imperial concern.)
- (v) Case law. (The extent to which judicial decisions of the English, Commonwealth or State Courts respectively form part of the State law would require too lengthy a statement to be set out here.)

The proper subjects for Federal legislation are limited to those specified in the Commonwealth Constitution. In some cases Federal powers of legislation are exclusive of, in others concurrent with, those of the State. In all cases of conflict valid Federal laws override State laws.

### THE JUDICIAL SYSTEM.

Characteristic features of the judicial system are—(a) The law is enforceable in public courts; (b) the judiciary is independent of control by the executive; (c) officials concerned with the administration of justice do not enjoy any exemption from law; (d) advocates are admitted to practice by the Supreme Court and are subject to control exercisable through the Court.

The work of the courts is distributed amongst various jurisdictions with a view to simplifying procedure and avoiding unnecessary delay. Minor civil matters are heard in Courts of Petty Sessions (Small Debts Courts) which have a jurisdiction limited in point of locality and amount. The civil jurisdiction of District Courts also is limited in these respects. The Supreme Court's jurisdiction is limited only in respect of matters which are reserved for the original jurisdiction of the Federal Courts. In criminal matters less serious offences are heard in Courts of Petty Sessions, and other offences, not being of a capital nature, are dealt with by Courts of Quarter Sessions. Capital charges are tried at sittings of the Supreme Court and, in practice, offences of an important public nature are often so dealt with.

A number of legal tribunals have been established to deal with special matters, viz., Licensing Courts, Taxation Courts of Review, Wardens' Courts (Mining), Courts of Marine Inquiry, Land and Valuation Court, Crown Employees Appeal Board, and, among courts of magisterial rank, Coroners' Courts and Children's Courts. Special jurisdictions are exercised by the Industrial Commission and by the Workers' Compensation Commission. Particular matters arising under the various land laws of the State are dealt with by Local Land Boards. A Transport Appeal Court, consisting of a District Court Judge, hears appeals from certain decisions of the transport authorities. Jurisdiction to hear disputes arising under the Friendly Societies Act and the Co-operation Act is given to the Registrar under those Acts.

New South Wales as a State of the Commonwealth forms part of the Commonwealth judicial system. By the Commonwealth Judiciary Act, 1903-1940, the jurisdiction of the High Court is exclusive in regard to certain matters. In regard to others matters the courts of the State are invested with Federal jurisdiction subject to conditions stated in that Act.

Appeal lies to the Privy Council from the Supreme Court of New South Wales and the High Court of Australia, respectively, in proper cases. The Privy Council is the final Court of Appeal for the British Dominions.

#### ADMINISTRATION OF JUDICIAL SYSTEM.

##### *Ministers of the Crown.*

In New South Wales the duty of administering laws is allotted to Ministers of the Crown in their respective spheres. As a general rule an Attorney-General and a Minister of Justice are included amongst the Ministers, but sometimes these offices are combined. At times a Solicitor-General has been included in the Cabinet. At other times he has been a salaried public servant. There is also a Crown Solicitor—a salaried public servant. A common practice is to have an officer known as Assistant Law Officer as a further legal adviser to the Government.

The Attorney-General, who is the legal adviser of the Government, is charged with the conduct of business relating to the higher courts (such as Supreme and District Courts), the offices of the Crown Solicitor, Crown Prosecutors, Clerk of the Peace, Parliamentary draftsmen and Court reporters, as well as statute law consolidation and certain Acts, including the Crimes Act, the Poor Prisoners' Defence Act, the Poor Persons' Legal Remedies Act and the Legal Assistance Act. Furthermore, he advises Ministers on questions on which his legal opinion is required, initiates and defends proceedings by and against the State, and determines whether a bill should be found in cases of indictable offences. The grand jury system has not been adopted. The Attorney-General is in the position of a grand jury to find a bill. No person can be put upon his trial for an indictable offence unless a bill has been found, except where an *ex officio* indictment has been filed by the Attorney-General or the Supreme Court has directed an information to be filed.

The Minister of Justice supervises the working of the magistrates' courts, of gaols and penal establishments, also the operations of the various offices connected with the Supreme and District Courts. He administers Acts of Parliament relating to justices, juries, coroners, prisons and prisoners, land-



lords and tenants, inebriates, real property, land titles, registration of firms, companies and deeds, births, deaths and marriages, and licensed trades and callings.

#### SUPREME COURT.

The Supreme Court of New South Wales was established in 1824 under the Charter of Justice. Jurisdiction is exercised by a Chief Justice and not more than ten Puisne Judges, of whom seven are engaged usually in the Common Law, including Commercial Causes and Criminal jurisdictions, and the remainder in Equity, Bankruptcy, Probate, Lunacy and Matrimonial Causes.

The Court possesses original jurisdiction over all litigious matters arising in the State, except where its jurisdiction is excluded by statute, in certain cases where extra-territorial jurisdiction has been conferred, in Admiralty and in appeal. Its original jurisdiction is exercised usually by one judge. The procedure and practice of the Court are defined by statute, or regulated by rules which may be made by any three or more judges. The Supreme Court has power at common law to restrain inferior courts which act in excess of their jurisdiction, and to grant mandamus to enforce a legal right. The right of appeal to the Supreme Court from inferior courts is purely the creation of statute law. In proper cases appeals may be carried from findings of the Supreme Court to the High Court of Australia or to the Privy Council.

Particulars are given below of each division of the civil jurisdiction of the Court.

#### *Common Law Jurisdiction.*

The jurisdiction of the Supreme Court at Common Law extends to cases not falling within any other jurisdiction. Actions are tried usually in the first instance in sittings at *nisi prius*, before one judge and a jury of four, or of twelve in special cases. A jury may be dispensed with by consent of both parties and under statutes governing certain cases. A judge may sit "in chambers" to deal with questions not requiring to be argued in court.

The following table gives particulars of causes set down and writs issued in the Supreme and Circuit Courts (Common Law Jurisdiction) during the last five years. The number of writs issued includes cases which were settled by the parties without further litigation.

TABLE 820.—Common Law Jurisdiction—Writs and Causes, 1942 to 1946.

Particulars.	1942.	1943.	1944.	1945.	1946.
Writs Issued ... ..	2,206	1,723	1,629	1,726	2,527
Judgments Signed ... ..	1,097	758	677	607	803
Causes Tried—					
Verdict for Plaintiff ... ..	216	153	188	170	172
"    Defendant ... ..	40	35	39	28	41
Jury Disagreed ... ..	9	...	...	2	1
Nonsuits ... ..	9	7	7	...	9
Total ... ..	274	195	234	200	223
Causes not proceeded with ... ..	159	92	91	80	64
Total Causes dealt with	433	287	325	280	287

The difference between the number of writs issued and judgments signed indicates the extent to which suits are not proceeded with, and the difference between the number of judgments signed and the number of causes tried indicates the extent to which cases are settled without legal proceedings in court.

#### *Equity Jurisdiction.*

The jurisdiction of the Supreme Court in Equity (which includes infancy) is exercised by the Chief Judge in Equity, or by any other Judge of the Supreme Court sitting in Equity. The procedure of the Court is governed by the Equity Act, 1901, and subsidiary rules. The jurisdiction extends to granting equitable relief by enforcing rights not recognised at Common Law and by special remedies such as the issue of injunctions, writs of specific performance, and a jurisdiction in infancy. The Court in making binding declarations of right may obtain the assistance of specialists such as actuaries, engineers, or other persons. In deciding legal rights incidental to its cases, it exercises all the powers of the Common Law jurisdiction of the Supreme Court, and may award damages in certain cases.

The office of the Court is under the control of the Master in Equity who performs many judicial functions, and, when directed by the Court, determines certain matters such as conducting inquiries, taking accounts, etc. He is also Registrar of the Court, and controls the records and funds within its charge.

The transactions in Equity during the year ended 30th June, 1946, included the following:—Decrees 46, orders on motions and petitions 1,671, and orders by Judge in Chambers 179. In 1944-45, 55 decrees were made, 1,681 orders on motions and petitions, 170 orders by Judge in Chambers and 4 orders by the Master in Equity.

#### *Lunacy Jurisdiction.*

The Supreme Court in its Lunacy jurisdiction is constituted, except on appeal, by the Chief Judge in Equity or by any other judge sitting for him during his absence or illness or at his request. In respect of the administration of estates the jurisdiction may be exercised by the Master in Lunacy and the Deputy Master in Lunacy.

Persons whose affairs are brought under control by the Lunacy Act are grouped in three main classes—(1) persons of unsound mind and incapable of managing their affairs; (2) persons who are incapable of managing their affairs through mental infirmity arising from disease or age; and (3) insane patients in the mental hospitals. The affairs of those in the first class are administered by committees, and those in the second class by managers, subject in both cases to the order and direction of the Court constituted by the Master; and the affairs of insane patients are administered by the Master in Lunacy.

The amount of trust funds controlled by the Master in Lunacy was £1,448,490 at 30th June, 1946. The Funds comprised mortgages £37,808, Commonwealth Government securities £1,150,488, fixed deposits £226,403 and cash £33,791. In addition there were assets of considerable value in the form of scrip, real estate, etc. A deduction ranging up to 4 per cent. from the net income of insane persons whose estates are managed by the Master in Lunacy amounted to £5,545 in 1945-46, and fees collected to £149.

*Probate Jurisdiction.*

Probate jurisdiction extends over all property, real or personal, in New South Wales of deceased persons, testate or intestate. The jurisdiction is exercised by a Probate Judge, or by any judge acting on his behalf.

The Registrar in Probate exercises jurisdiction in granting probate and letters of administration in all matters where no contention has arisen and in passing the accounts of executors and administrators, including the allowance of commission to them for their trouble. The Registrar or any interested party may refer any matter to the Court. The Registrar also exercises jurisdiction in minor dealings affecting estates where no objection is raised by any interested party.

Until the granting of probate or letters of administration the property of deceased persons vests in the Public Trustee and cannot be legally dealt with except in minor matters. In this way the rights of the successors, the creditors and the State are safeguarded. Cases of disputed wills are tried by the Judge, with or without a jury, to determine issues of fact, and jurisdiction is exercised over administrators and executors.

The following table shows the number and values of estates dealt with in the past five years:—

TABLE 821.—Probate Jurisdiction—Number and Value of Estates, 1942 to 1946.

Year.	Probates Granted.		Letters of Administration.		Total.	
	Number of Estates.	Gross Value of Estates.	Number of Estates.	Gross Value of Estates.	Number of Estates.	Gross Value of Estates.
		£		£		£
1942	7,564	28,028,503	2,641	2,987,232	10,205	31,015,735
1943	8,135	31,654,520	3,270	3,908,700	11,405	35,563,220
1944	8,217	32,444,392	3,080	3,273,382	11,297	35,717,774
1945	8,306	33,913,219	2,915	4,311,822	11,221	38,225,041
1946	9,384	37,078,201	3,426	3,425,861	12,810	40,504,062

The values shown above represent the gross value of estates, inclusive of those not subject to duty, and of estates dealt with by the Public Trustee. In some cases probate or letters of administration are taken out a second time and such estates are duplicated in the foregoing figures. Where estates are less than £300 in value probate or letters of administration may be granted on personal application to the Registrar, without the intervention of a solicitor.

*Jurisdiction in Matrimonial Causes (Divorce).*

This jurisdiction was conferred on the Supreme Court by the Matrimonial Causes Act, 1873. Previously marriages could be dissolved only by special Act of Parliament. This Act, with its amendments, was consolidated in 1899, and the consolidated Act was amended in 1929 and 1943.

A Judge of the Supreme Court is appointed Judge in Divorce, but any other judge may act for him. The forms of relief granted are dissolution of marriage, judicial separation, declaration of nullity of marriage, jactitation of marriage and orders for restitution of conjugal rights. Orders for

the custody of children, alimony, damages, and settlement of marriage property may be made. Decrees for the dissolution of marriage are usually made provisional for a short period, and absolute at the expiration thereof if no reason to the contrary is shown, e.g., collusion. Where there is reason to believe that dissolution of marriage is sought for ulterior motives and that collusion has taken place between the parties, it is customary for the Crown to intervene and place before the Court any relevant facts in its possession. The Crown, however, cannot intervene after the *decree nisi* has been made absolute.

The grounds on which dissolution may be granted on petition and the conditions as to domicile have been set out in earlier issues of this Year Book.

The following statement shows the number of petitions in matrimonial causes made and granted in New South Wales during the past eight years in comparison with the average per year in quinquennial periods since 1908:—

TABLE 822.—Divorces, etc.—Petitions and Decrees, 1908 to 1946.

Year.	Petitions for Divorce, Judicial Separation, and Nullity of Marriage Lodged.	Number of Petitions Granted.					Restitution of Conjugal Rights.	
		Divorce.		Petitions for Judicial Separation Granted.	Nullity of Marriage.		Petitions.	Decrees Granted.
		Decrees <i>Nisi</i> Granted.	Decrees <i>Nisi</i> made Absolute.		Decrees <i>Nisi</i> Granted.	Decrees <i>Nisi</i> made Absolute.		
1908-12*	453	260	260	12	4	4	28	18
1913-17*	642	393	342	9	3	3	74	51
1918-22*	1,041	672	562	13	7	5	236	141
1923-27*	1,391	992	903	13	9	8	266	168
1928-32*	1,480	1,060	967	10	11	9	311	180
1933-37*	1,749	1,216	1,124	13	11	11	365	224
1938-42*	2,037	1,589	1,521	9	6	6	414	285
1939	1,973	1,484	1,540	8	7	5	397	301
1940	1,892	1,722	1,479	13	3	5	392	306
1941	2,002	1,514	1,559	10	7	8	375	258
1942	2,413	1,698	1,602	5	6	4	474	273
1943	3,038	1,980	1,828	3	11	9	776	454
1944	3,807	2,905	2,027	5	36	17	1,100	741
1945	4,199	2,621	3,097	10	31	32	1,244	681
1946	4,309	3,453	2,771	6	22	21	1,538	1,117

\* Average per year.

In 1939 the number of petitions for divorce, judicial separation or nullity of marriage, 1,973, was higher than in any earlier year. After a slight decline in 1940, the number increased rapidly to 3,038 in 1943 and further to 4,309 in 1946.

The number of petitions lodged with a suspension of fees or *in forma pauperis* during 1946 was 409; of which 363 were for divorce, 3 for nullity of marriage, 1 for judicial separation, and 42 for restitution of conjugal rights.

The number of petitioners of each sex in cases where decrees for divorce or nullity of marriage were made absolute or judicial separation was granted during each of the past ten years was as follows:—

TABLE 823.—Divorce, Nullity of Marriage, Judicial Separation—Sex of Successful Petitioners, 1937 to 1946.

Year in which Petition was Granted.	Number of Successful Petitions lodged by—			Year in which Petition was Granted.	Number of Successful Petitions lodged by—		
	Husband.	Wife.	Total.		Husband.	Wife.	Total.
1937	530	753	1,283	1942	772	839	1,611
1938	611	829	1,440	1943	918	922	1,840
1939	667	886	1,553	1944	1,115	934	2,049
1940	671	826	1,497	1945	1,703	1,436	3,139
1941	722	855	1,577	1946	1,469	1,329	2,798

The majority of successful petitions for divorce, nullity or separation were granted on the petitions of wives until 1943, but in later years these were exceeded by the number lodged by husbands. The proportions in the three years 1937 to 1939 were husbands 42 per cent. and wives 58 per cent., and in the years 1944 to 1946 husbands 54 per cent., wives 46 per cent.

The grounds for divorce in cases where decrees were made absolute during each of the past ten years were as follows:—

TABLE 824.—Divorce—Grounds, 1937 to 1946.

Year (Decree made Absolute).	Grounds on which Divorces were Granted.							
	Adultery	Adultery and Bigamy.	Cruelty.	Drunkenness and Cruelty.	Drunkenness and Neglect to Support or Neglect Domestic Duties.	Desertion.	Non-compliance with Order for Restitution of Conjugal Rights.	Other and Not Stated.
1937	284	...	2	11	12	772	172	8
1938	309	2	5	10	16	827	252	3
1939	348	1	11	16	17	899	242	6
1940	304	2	6	10	15	783	280	73
1941	328	1	8	17	9	856	274	66
1942	389	2	6	22	13	905	256	9
1943	440	1	5	29	15	1,055	275	8
1944	541	1	12	30	24	1,072	341	6
1945	933	5	29	37	17	1,468	593	15
1946	867	2	17	45	13	1,251	557	19

In the three years 1937 to 1939 the grounds for divorce were desertion or non-compliance with orders for restitution of conjugal rights in 75 per cent. and adultery in 22 per cent. of the cases where decrees were made absolute; the proportions in the three years 1944 to 1946 were 67 per cent. and 30 per cent. respectively.

Particulars of the duration of marriage and issue, in cases in which decrees nisi for divorce were made absolute in 1939 and each of the last three years are shown in the following table.

TABLE 825.—Divorces—Duration of Marriage and Issue, 1939 to 1946.

Duration of Marriage.	Divorces.				Number of Children	Divorces.			
	1939.	1944.	1945.	1946.		1939.	1944.	1945.	1946.
Years.									
Under 5 ...	89	264	500	371	0	476	773	1,236	1,083
5 to 9 ...	420	582	969	899	1	523	595	864	784
10 to 14 ...	457	448	634	620	2	206	341	516	506
15 to 19 ...	264	336	471	423	3	137	140	242	201
20 to 29 ...	259	318	407	378	4	57	93	103	107
30 and over	51	79	116	80	5 and over	51	74	123	84
					Not stated	...	11	13	6
Total ...	1,540	2,027	3,097	2,771	Total ...	1,540	2,027	3,097	2,771

The duration of marriage, i.e., the interval between marriage and the date the decree nisi for divorce was made absolute, was less than 5 years in 6 per cent., and less than 10 years in 33 per cent., of the cases in 1939. The corresponding proportions were 16 per cent. and 47 per cent. in 1945 and 13 per cent. and 46 per cent. in 1946.

There was no child of the marriage in 31 per cent., and one child in 34 per cent. of the cases in 1939, and no child in 40 per cent. and one child in 28 per cent. of the cases in 1945 and 1946.

Particulars regarding the age at marriage of persons divorced—decrees made absolute—in 1946 are shown below:—

TABLE 826.—Divorces—Age of Husband and Wife at Marriage, 1946.

Age of Husband at Marriage.	Age of Wife at Marriage.					Husbands.	
	Under 21 years.	21 to 24 years.	25 to 29 years.	30 to 34 years.	35 years and over.	Total.	Per cent.
	No.	No.	No.	No.	No.	No.	
Under 21 years ...	310	40	5	1	...	356	12.8
21 to 24 years ...	611	503	61	6	2	1,183	42.7
25 to 29 years ...	227	352	163	19	7	768	27.7
30 to 34 years ...	65	72	81	26	7	241	8.7
35 years and over ...	22	30	64	37	70	223	8.1
Wives—Total ...	1,225	997	374	89	86	2,771	...
Per cent. ...	44.2	36.0	13.5	3.2	3.1	...	100

More than 44 per cent. of the wives and nearly 13 per cent. of the husbands divorced in 1946 were under 21 years of age at marriage, and 80 per cent. of the wives and 55 per cent. of the husbands were under 25 years of age.

#### *Admiralty Jurisdiction.*

Jurisdiction as a Colonial Court of Admiralty was conferred on the Supreme Court of New South Wales on 1st July, 1911, by Order-in-Council, under the Colonial Courts of Admiralty Act (Imperial), 1890. The Prize Act (Imperial), 1939, extends to Australia and prize rules were promulgated by Order-in-Council of 19th October, 1939.

#### HIGHER CRIMINAL COURTS.

The higher courts of criminal jurisdiction consist of the Central Criminal Court (which sits in Sydney and is presided over by a Judge

of the Supreme Court), the Supreme Court on circuit, and Courts of Quarter Sessions held at important centres throughout the State, each presided over by a Judge of the District Court as chairman of Quarter Sessions. These courts deal with indictable offences which are the more serious criminal cases. Offences punishable by death may be tried only before the Central Criminal Court, which exercises the criminal jurisdiction of the Supreme Court, or before the Supreme Court on circuit.

All persons charged with criminal offences must be charged before a judge with a jury of twelve chosen by lot from a panel provided by the sheriff. The question of the guilt or innocence of the accused is determined by the jury after the direction by the presiding judge as to the law and the facts proved by evidence, and the verdict must be unanimous. If unanimity is not reached within twelve hours, the jury is discharged and the accused may be tried before another jury.

Indictable offences against Commonwealth law are tried before these courts.

#### *Central Criminal Court and Supreme Court on Circuit.*

The Central Criminal Court exercises the criminal jurisdiction of the Supreme Court in Sydney, and a Judge of the Supreme Court presides at sittings of the Supreme Court in circuit towns. Usually capital offences, the more serious indictable offences committed in the metropolitan area and offences which may not be tried conveniently at Quarter Sessions or at sittings of the Supreme Court in the country are tried at the Central Criminal Court. Appeal from these courts lies to the Court of Criminal Appeal, consisting of three or more Judges of the Supreme Court and, in proper cases, to the High Court of Australia or the Privy Council. A Judge of the Supreme Court sitting in Sydney or at circuit towns may act as a Court of Gaol Delivery, to hear and determine the cases of untried prisoners upon returns of such prisoners supplied by the gaolers of the State under rules of the Court.

#### *Courts of Quarter Sessions.*

These courts are held at times and places appointed by the Governor-in-Council, in districts which coincide with those of District Courts. Forty-six places were appointed in 1946, courts being held usually prior to District Court sittings, from two to four times a year in country centres, but eleven times in Sydney, and six times in Parramatta.

In addition to exercising their original jurisdiction, the courts hear appeals from Courts of Petty Sessions and certain appeals from other courts, *e.g.*, Licensing Courts. Appeals from Quarter Sessions or sittings of the Supreme Court by persons convicted on indictment are heard by the Court of Criminal Appeal.

#### *Cases before Higher Criminal Courts.*

The following table relates to the number of distinct persons charged before Courts of Quarter Sessions, sittings of the Supreme Court at circuit towns and the Central Criminal Court, and it shows the number of convictions in each of the classes of more serious offences. Where two or more charges were preferred against the same person, account has been taken only of the principal charge.

TABLE 827.—Higher Courts—Persons Charged and Convictions, 1930-31 to 1945-46.

Year ended 30th June.	Distinct Persons Charged.	Not Guilty, etc.	Convictions—Principal Offence.					Total Persons Convicted.	
			Against Person.	Against Property.	Against Currency, and Forgery.	Other Offences.	Number.	Per 10,000 of Popula- tion.	
1931 ...	1,711	503	170	977	36	25	1,208	4.75	
1939 ...	1,173	369	188	577	29	10	804	2.94	
1940 ...	1,394	412	175	764	23	20	982	3.56	
1941 ...	1,174	313	173	606	30	52	861	3.09	
1942 ...	1,193	307	248	576	16	46	886	3.16	
1943 ...	1,182	241	239	664	6	32	941	3.32	
1944 ...	1,470	340	266	829	6	29	1,130	3.96	
1945 ...	1,347	297	253	772	6	19	1,050	3.64	
1946 ...	1,474	296	290	864	5	19	1,178	4.04	

Trials of accused persons in higher criminal courts take place on indictment by the Attorney-General, usually after magisterial inquiry into the sufficiency of evidence for such trials, and the question of guilt is decided by a jury of laymen. Nevertheless, only about 78 per cent. of the persons charged during the five years ended June, 1946, were convicted; in the case of offences against the person the proportion was approximately 65 per cent.

Of the persons convicted during the year ended 30th June, 1946, males numbered 1,120 and females 58.

The following table shows the number of persons convicted for specific offences included in the foregoing statement:—

TABLE 828.—Higher Courts—Convictions for Certain Specific Offences, 1930-31 to 1945-46.

Offences.	Number of Offenders Convicted.					
	1930-31.	1938-39.	1940-41.	1943-44.	1944-45.	1945-46.
Murder ... ..	8	6	5	1	9	2
Attempted Murder and Shooting with Intent ... ..	4	4	3	3	4	1
Manslaughter ... ..	1	4	5	13	5	15
Rape and other Offences against Females ... ..	44	50	61	62	45	75
Unnatural Offences ... ..	13	26	22	47	33	28
Abortion and Attempts to Procure ... ..	4	7	...	10	4	1
Bigamy and Offences relating to Marriage ... ..	17	19	29	54	59	85
Assault ... ..	56	28	10	22	28	35
Burglary and Housebreaking ... ..	383	374	388	491	497	556
Robbery and Stealing from the Person ... ..	52	37	61	83	46	58
Stealing Horses, Cattle, Sheep ... ..	2	4	1	1	1	1
Embezzlement and Stealing by Servants ... ..	24	10	12	16	9	4
Larceny and Receiving ... ..	326	90	93	187	172	177
Fraud and False Pretences ... ..	72	39	27	29	16	23.
Arson ... ..	7	6	7	5	2	10
Forgery, Uttering Forged Documents ... ..	29	19	25	6	6	5
Conspiracy ... ..	12	7	25	17	6	4
Perjury and Subornation ... ..	5	1	7	3	4	5



## DISTRICT COURTS.

District Courts have been in existence in New South Wales since 1858 as intermediaries between the Small Debts Courts and the Supreme Court. They are presided over by judges with special legal training, whose jurisdiction is defined in the District Courts Act, 1912-1936. Sittings are held at places and times appointed by the Governor-in-Council. The courts sit at intervals during ten months of the year in Sydney, and two or more times per year in important country towns. A registrar and other officers are attached to each court. At the close of 1946 there were 67 district courts and 11 district court judges.

Ordinarily cases are heard by a judge sitting alone, but a jury may be empanelled by direction of the judge, or upon demand by either plaintiff or defendant, in any case where the amount claimed exceeds £20. The jurisdiction of the Court extends over issues of fact in equity, probate and divorce proceedings remitted by the Supreme Court and over actions at Common Law involving an amount not exceeding £400, or £200 where a title of land is involved.

The findings of the District Court are intended to be final, but new trials may be granted and appeals may be made to the Supreme Court in certain cases.

Particulars of suits brought in District Courts in their original jurisdictions during 1939 and the last five years are given in the following table:—

TABLE 829.—District Courts—Transactions, 1939 to 1946.

Year.	Causes Tried.		Causes Dis-continued or Settled without hearing.	Judgment for Plaintiff by default, Con-cession, or Agree-ment.	Causes Settled by Arbi-tration.	Total Suits disposed of.	Total Suits arising during Year.	Causes Pending and in Arrear.
	Verdict for Plaintiff.	Verdict for Defendant (including Nonsuit, etc.).						
1939 ...	840	246	4,058	6,890	1	12,035	12,481	4,591
1942 ...	536	140	3,430	3,422	...	7,528	7,328	2,776
1943 ...	444	121	2,297	2,220	...	5,082	3,873	1,567
1944 ...	398	99	1,724	1,310	...	3,531	3,176	1,212
1945 ...	394	96	1,795	1,296	8	3,589	3,455	1,078
1946 ...	501	171	2,099	1,653	3	4,427	5,151	1,802

Of the causes tried during 1946, 101 were tried by jury and 571 without a jury. The amount of judgment for plaintiffs during the year was £149,988.

In addition to the suits covered by the foregoing table, a considerable amount of work under various Acts is done in the District Courts.

## LAND AND VALUATION COURT.

The Land Court of Appeal, established originally in 1889, was reconstituted at the close of 1921, as the Land and Valuation Court. This court is presided over by a judge, who is also a Judge of the Supreme Court; he may sit as an open court at such places as he determines, and, in certain circumstances, with two assessors in an advisory capacity. The procedure

of the court is governed by rules made by the Judge, who also exercises powers over witnesses and the production of evidence similar to those of a Judge in the Supreme Court. On questions of fact the decisions of the Judge are final, but appeal may be made to the Supreme Court against his decision on points of law.

The Court exercises original jurisdiction in: (a) claims for compensation arising out of resumption by public authorities or for damages caused by the execution of authorised works; (b) registration of land agents and their charges; and (c) determination of certain rentals under the Landlord and Tenant Act. The Court also exercises appellate jurisdiction in respect of (a) appeals from the decisions of the local land boards under the Crown Lands Acts, Pastures Protection Acts, Irrigation Acts and kindred Acts; (b) valuations by the Valuer-General; (c) valuations by rating authorities, including the City Council, where the valuation exceeds £5,000; (d) claims for compensation in respect of delicensed premises; (e) claims for compensation under the Mines Subsidence Act; and (f) appeals under the Reclamation Act and the Transport Act.

#### WORKERS' COMPENSATION COMMISSION.

A special and exclusive jurisdiction has been conferred on the Workers' Compensation Commission of New South Wales to examine into and determine questions arising under the Workers' Compensation Act. The Commission is a body corporate and consists of a chairman and three other members appointed from barristers of more than five years' standing. All have the same status, salary, pension rights and tenure of office as District Court judges. Each judge sits alone and exercises the jurisdiction, powers and authorities of the Commission. The sittings are arranged by the chairman, who is also the permanent head of the staff of the Commission. Under certain conditions, an acting judge may be appointed.

The Commission may appoint qualified medical practitioners to be medical referees and may obtain medical reports from a referee or a medical board consisting of two or more referees.

For the purpose of conducting its proceedings the Commission has certain powers of a Commissioner under the Royal Commissions Act, 1923-1934.

The determinations of the Commission on matters of fact are final and may not be challenged in any court. Appeal by way of a case stated on questions of law lies to the Supreme Court and from the Supreme Court to the High Court of Australia and the Privy Council. The Commission is required to furnish workers and employers with information as to their rights and liabilities under the Workers' Compensation Act, and to endeavour to bring parties to agreement and to avoid litigation. This work is carried out by its Conciliation and Information Bureau under the supervision of the Commission's Registrar as Conciliator. No charge is made for these services. In practice 98 per cent. of claims for compensation are settled by agreement and few are contested before the Commission.

The cost of the Commission's administration is borne by a fund for which contributions are levied, under statutory authority, on insurers who undertake the liability to pay compensation.

Further particulars relating to compensation are given in the chapter relating to Employment.

## COURTS OF MARINE INQUIRY.

Cases of shipwreck or casualty to British vessels, or the detention of any ships alleged to be unseaworthy, and charges of misconduct against officers of British vessels arising on or near the coast of New South Wales, or on any ship registered at or proceeding to any port therein, are heard by one or more authorised Judges of the District Court or Stipendiary Magistrates sitting with two or more assessors as a Court of Marine Inquiry. Provision is made in the Navigation Act, 1912-1942 for appeal from a Court of Marine Inquiry to the Supreme Court.

The proceedings of the Court are governed by the Navigation Acts of the State and Commonwealth.

## INDUSTRIAL TRIBUNALS.

A system of industrial arbitration was inaugurated in 1901, when courts of law were established to determine certain disputes between employers and employees relating to working conditions. The system has been changed fundamentally from time to time, and the statutory basis of the present system is the Industrial Arbitration Act, 1940-1948.

The Industrial Commission of New South Wales is the chief industrial tribunal. It consists of not more than six members, one of whom is the President. At sittings of the Commission three members shall be present as arranged by the President, and any question may be decided according to the decision of the majority. In any particular matter the Commission may delegate any of its powers or functions to any one member, but appeal from his findings lies to the Commission. Members hold office during good behaviour and have the same status and rights as a puisne Judge of the Supreme Court. Persons eligible for appointment as a member of the Commission are puisne Judges of the Supreme Court, District Court Judges, practising barristers of five years' standing and practising solicitors of seven years' standing. The Commission on any reference or application to it may make awards fixing rates of pay and working conditions, determine the standard hours to be worked in industries within its jurisdiction, and determine any "industrial matter," which by definition under the Act has wide application. It has authority to adjudicate in cases of illegal strikes, lockouts or unlawful dismissals, and may summon persons to a compulsory conference and hear appeals from the determinations of the subsidiary industrial tribunals.

The powers of the Commission were extended in December, 1938, to enable it to conduct investigations regarding the prices of commodities and services and the rents of dwellings, and in 1939 the Commission was authorised to fix the maximum prices for certain commodities, but these functions were undertaken during wartime by Commonwealth authority.

The Industrial Arbitration (Amendment) Act, 1943, provided for the appointment for a term of seven years of not more than five Conciliation Commissioners. A Conciliation Commissioner acts as chairman of the Conciliation Committees established for various industries on the recommendation of the Industrial Commission. The Committees are allotted to each chairman by the Commission. A Committee has power to inquire into industrial matters in the industry for which it is established and on reference or application to it, to make an order or award prescribing rates of wages and other conditions of employment.

At meetings of a Conciliation Committee each member, except the chairman, has a vote, but where voting is not decisive the chairman decides the question.

Where an industrial dispute has occurred or is impending, a Conciliation Commissioner may summon the parties to compulsory conference. If the parties are unable to come to agreement the Commissioner sitting alone or if summoned by him the appropriate Committee under his chairmanship, may make an award or order in the matter or may refer it to the Industrial Commission for determination or directions.

The Apprenticeship Commissioner (who is one of the Conciliation Commissioners) and the members of the Conciliation Committee for an industry constitute the apprenticeship council for that industry, with power to regulate wages, hours, and other conditions of apprenticeship.

Industrial magistrates exercise jurisdiction in cases arising out of non-compliance with awards and statutes governing working conditions of employees. Their powers are cognate with those of stipendiary magistrates.

Further information regarding these tribunals is published in the chapter relating to "Industrial Arbitration."

#### TAXATION APPEALS.

The Income Tax (Management) Act provides for the constitution of a Board of Appeal to hear and determine appeals against assessments of State income tax. Its decision is final except where a question of law is involved, or in the case of a question of fact, when the Board certifies that the amount of tax in dispute exceeds the sum of three hundred pounds. In such a case appeal lies from the Board to the Full Supreme Court.

An appeal may be made direct to the Supreme Court against the decision of the Commissioner of Taxation on an objection to an assessment in any case, except where the taxpayer is dissatisfied with any opinion, decision or determination given by the Commissioner in the exercise of a discretion conferred upon him by statute. Appeals against the exercise of the Commissioner's discretion may be made to the Board of Appeal only. For the purpose of hearing appeals made direct to it, the Supreme Court consists of a single justice. There is no right of appeal to the Full Court, but the Court may state a case for the opinion of the Full Supreme Court upon questions of law. There is an appeal to the High Court from any decision of the Supreme Court, whether that decision is given by a single justice or by the Full Court.

By arrangement with the Commonwealth, the States discontinued taxation of incomes as from 1st July, 1942, and the income of the year, 1940-41, was the last on which State tax was levied in New South Wales.

#### LOWER COURTS OF CIVIL JURISDICTION.

##### *Courts of Petty Sessions (Small Debts Court).*

A limited civil jurisdiction is conferred by the Small Debts Recovery Act, 1912-1933, on magistrates and justices sitting as Small Debts Courts to determine, in a summary way according to equity and good conscience, actions for the recovery of debt or damages. The jurisdiction of these courts is limited to cases involving not more than £50. A stipendiary magistrate may exercise the full jurisdiction of the court, two justices of the peace may hear cases involving amounts up to £30 and one justice up to £5. In

cases of unliquidated demands the jurisdiction of two justices extends only to cases involving £10, or, by consent of the parties, up to £30, but the courts may not deal with matters involving titles to freehold or future rights.

In general, a decision of the court is subject to review only when it exceeds its jurisdiction or violates natural justice.

The principal officers of the court are a registrar, who acts as clerk to the bench and may enter judgment in cases of default of defence or where claims are admitted and agreed upon, and such bailiffs as are appointed from time to time for the service and execution of process.

Particulars of the transactions of Small Debts Courts during 1939 and the last five years are shown below:—

TABLE 830.—Small Debts Courts Transactions, 1939 to 1946.

Year.	Plaints entered.	Verdicts for Plaintiff.		Executions issued.	Garnishee Orders issued.	
		Number.	Amount.			
			£			
1939	...	78,970	45,300	426,429	10,664	13,544
1942	...	40,132	20,799	207,170	4,824	6,209
1943	...	28,725	14,502	141,049	3,184	4,327
1944	...	19,635	10,244	103,862	2,421	3,401
1945	...	18,064	8,825	99,049	1,945	2,660
1946	...	20,245	9,832	110,321	2,136	2,432

In garnishee cases the Court may order that all debts due by a garnishee to the defendant may be attached to meet a judgment debt, and by a subsequent order, may direct the garnishee to pay so much of the amount owing as will satisfy the judgment debt. In respect of wages or salary, garnishee orders may be made only for so much as exceeds £3 per week. The garnishee cases numbered 2,472 in 1946, as compared with 13,544 in 1939.

#### *Licensing Courts.*

Under the Liquor Act of 1912 and amendments, three persons, each of whom is a stipendiary magistrate, are appointed licensing magistrates in respect of licenses for the sale of intoxicating liquor and constitute the Licensing Courts for the licensing districts of the State.

The licensing magistrates are empowered, with the approval of the Minister, to delegate their jurisdiction either generally or in any special matter to stipendiary magistrates. Under a general delegation applications for renewals, transfers, booth licenses and other minor matters outside the Metropolitan Licensing District are dealt with by stipendiary magistrates.

The Licensing Court sits as an open court and appeals from its decisions lie to a Court of Quarter Sessions.

The three licensing magistrates also constitute the Licenses Reduction Board, which was established to reduce publicans' and Australian wine licenses.

Provision for reconstitution of the Licensing Courts and the Board on a date to be proclaimed has been made by the Liquor Amendment Act of 1946 (see page 888).

Particulars relating to the operations of the Licensing Courts and the Licenses Reduction Board are shown in the chapter entitled "Social Condition."

*Wardens' Courts (Mining).*

By virtue of the Mining Act, 1906-1946, mining wardens may hold courts to determine disputes within their districts as to the possession of mining lands, or claims under mining contracts. In general their procedure is summary and their decisions final, but appeal lies in certain cases to a District Court sitting as a Mining Appeal Court or, on points of law, by way of stating a case to the Supreme Court.

*Land Boards.*

Local Land Boards, each consisting of a salaried chairman, usually possessing legal and administrative experience, and two other members (paid by fees) possessing local knowledge, were first appointed under the Crown Lands Act of 1884. These boards sit as open courts and follow procedure similar to that of Courts of Petty Sessions. Their functions are to determine questions under the Crown Lands Acts and other matters referred by the Minister. Sittings are held as required at appointed places in each of twelve Land Board Districts in the Eastern and Central Divisions of the State. There are also special Land Boards for the Yanco, Mirrool and Coomealla Irrigation Areas, having the powers and duties of a Local Land Board.

The management and control of Crown Lands in the Western Division of the State is vested in a Commissioner, subject to the direction and control of the Minister for Lands, and two Assistant Commissioners who exercise such powers and functions of the Commissioner as he may direct. The Commissioner and Assistant Commissioners are appointed by the Governor and the term of office is ten years. There are Land Boards in the administrative districts of this division as in other territorial divisions. The members are the Commissioner, an Assistant Commissioner and a local representative (paid by fees). Two members constitute a quorum except in the consideration of matters referred by the Minister for inquiry or recommendation and applications for leases of land made available for settlement by way of original or additional holdings, when all three members sit.

*Courts of Petty Sessions (Fair Rents Courts).*

The Fair Rents Act, 1939, which commenced on 1st December, 1939, provides that a lessor or lessee of a dwelling house let at a weekly rental not exceeding £3 10s. or of a shop let at a weekly rental not exceeding £6 may apply to the nearest Court of Petty Sessions held before a stipendiary magistrate for a determination of a fair rent of the premises. The Act prescribes the manner in which such determination is to be made. No costs are allowed in proceedings of this nature and the determination of the Court is final. The court may, however, state a special case for the opinion of the Supreme Court on any question of law arising in the course of the proceedings.

As from 28th November, 1941, the Fair Rents Act, 1939, was superseded in so far as it was inconsistent with Commonwealth regulations under the National Security Act or the Defence (Transitional Provisions) Act. The regulations provided for the determination of fair rents by Fair Rents Boards or the Commonwealth Rent Controller, and the powers and func-

tions of the boards were exercised by Stipendiary or Special Magistrates of the State or, if so determined by the Minister, any such magistrate and two other persons. The regulations were applied to premises or classes of premises by order of the Minister published in the Commonwealth Gazette. Further particulars regarding the regulation of rents in New South Wales are published in the chapter, Food and Prices, of this volume.

#### LOWER COURTS OF CRIMINAL AND QUASI-CRIMINAL JURISDICTION.

##### *Courts of Petty Sessions.*

These courts are held daily in large centres and periodically in small centres. Though known as courts of inferior jurisdiction, they are concerned with criminal, quasi-criminal and civil issues arising from Commonwealth and State legislation.

The criminal jurisdiction arises mainly under the State Crimes Act, the Commonwealth Crimes Act, the Vagrancy Act, the Police Offences Act, and, during the war period, the Commonwealth National Security or other regulations, which describe the nature of the offences, penalties and procedure, and prescribe the number of justices or magistrates for the trial of various offences.

In the quasi-criminal and civil jurisdiction, issues arise in tort and contract under the Small Debts Recovery Act (see page 966), and under Commonwealth and State legislation with respect to moratorium orders, hire-purchase agreements, money-lending transactions, detention of property, taxation laws, rights of landlords and tenants, inebriates, lunacy, marriage, husbands and wives and masters and servants.

Courts of Petty Sessions were appointed tribunals in respect of matters arising under the National Security Act or the Defence (Transitional Provisions) Act and regulations thereunder.

Procedure generally is governed by the Justices Act, 1902-1947. Cases are heard by a stipendiary magistrate in Sydney and in nine other centres; in other districts by a magistrate or justices of the peace, unless the magistrate has exclusive jurisdiction.

The criminal jurisdiction is concerned with offences punishable summarily; it includes most offences against good order and breaches of regulations and certain indictable offences which may be determined summarily with the consent of the defendant. Other offences, originally indictable, may be determined summarily without the consent of the defendant as provided by the State Crimes Act, where the amount of the money or the value of the property in respect of which the offence is charged does not exceed ten pounds, or under the Commonwealth Crimes Act, where the offence relates to property the value of which does not exceed fifty pounds. In other indictable cases, a magisterial inquiry is held and the accused is committed for trial to a higher court when a *prima facie* case is established.

Reference to the right of appeal to Quarter Sessions is made on page 973.

##### *Children's Courts.*

Children's courts were established in 1905 to exercise jurisdiction under Acts subsequently consolidated by the Child Welfare Act, 1923, which was replaced by a new Act brought into operation on 1st December, 1939. Each

court consists of a special magistrate with jurisdiction within a proclaimed area. Elsewhere the jurisdiction of a court may be exercised by a special magistrate or two justices of the peace.

The magistrates exercise all the powers of a Court of Petty Sessions in respect of children under 16 years of age and young persons under 18 years of age and in respect of offences committed by or against them to the exclusion of the ordinary courts of law. Jurisdiction is also exercised in respect of neglected and uncontrollable children.

The Court is endowed with extensive powers, such as committal of children to institutions, to the care of persons other than the parents or to the care of the Minister for Education to be dealt with as wards, etc. The functions of the Court are reformatory, not punitive.

Where practicable children's courts are not held in ordinary court rooms and at any hearing or trial persons not directly interested are excluded. By these means children are protected against the adverse influences which they would encounter in the ordinary courts.

Children's courts deal with proceedings for the maintenance of illegitimate children under the Child Welfare Act and complaints for maintenance of wife and children under the Deserted Wives and Children Act. They act reciprocally with other States of the Commonwealth under the Interstate Destitute Persons Relief Act and with other British Dominions under the Maintenance Orders (Facilities for Enforcement) Act, in the making and enforcement of orders for maintenance when one of the parties is resident outside New South Wales. The Courts deal also with disputed questions of custody under the Infants' Custody and Settlements Act, 1899-1934.

Appeal from its decision lies in proper cases to the Supreme Court, Quarter Sessions or, in certain circumstances, to a District Court.

Separate statistics of the proceedings of Children's Courts in districts other than Sydney are not available, as they are included with those of ordinary Courts of Petty Sessions.

#### *Cases before Magistrates' Courts.*

Particulars of the number of offences charged and convictions obtained in Courts of Petty Sessions and Children's Courts, are shown below:—

TABLE 831.—Courts of Petty Sessions and Children's Courts—Charges and Convictions, 1931 to 1946.

Year.	Offences Charged.				Proportion of Total Offences Charged.		
	Withdrawn or Discharged.	Convicted.	Committed to Higher Courts.	Total.	Withdrawn.	Convicted.	Committed to Higher Courts.
					per cent.	per cent.	per cent.
1931	17,317	101,675	2,751	121,743	14.2	83.5	2.3
1939	16,207	126,353	2,288	144,848	11.2	87.2	1.6
1940	15,319	131,891	2,211	149,421	10.3	88.3	1.4
1941	12,018	119,735	1,717	133,470	9.0	89.7	1.3
1942	11,792	140,620	2,119	154,531	7.6	91.0	1.4
1943	14,326	118,366	2,811	135,503	10.6	87.4	2.0
1944	12,862	111,008	2,631	126,501	10.2	87.7	2.1
1945	12,036	125,982	3,061	141,079	8.5	89.3	2.2
1946	12,637	157,108	3,566	173,311	7.3	90.6	2.1



Except where otherwise stated, the foregoing figures represent the total number of offences charged, and where multiple charges are preferred at the same time, separate account is taken of each. The figures should not be used for the purpose of comparison with other States or countries, unless the same rules are observed in tabulating the statistics of crime.

Towards the end of 1916 provision was made whereby persons arrested for drunkenness were allowed to forfeit a deposit (nominally bail) in lieu of appearing in court. The majority of the cases of drunkenness are dealt with in this manner and they are included in the statistics as convictions, as well as those cases where the offender is admonished and set free without penalty.

It is not possible to determine the number of distinct persons charged in each year, as particulars obtained from persons accused of minor offences, particularly vagrants, do not form a reliable basis for identification.

Only a small proportion of the offences for which summary convictions are effected are really criminal offences, that is, offences against persons or property. The following table shows a classification of the offences for which summary convictions were recorded, also the rate per 1,000 of mean population:—

TABLE 832.—Courts of Petty Sessions and Children's Courts—Convictions, 1931 to 1946.

Year.	Number of Convictions.					
	Against the Person.	Against Property.	Against Good Order.		Other Offences.	Total Summary Convictions.
			Drunkenness.	Other.		
1931 ...	1,849	11,708	20,559	15,598	51,961	101,675
1939 ...	1,667	10,968	32,405	14,288	67,025	126,353
1940 ...	1,684	11,385	34,575	14,712	69,535	131,891
1941 ...	1,639	10,019	34,637	13,929	59,511	119,735
1942 ...	1,914	12,426	34,870	17,748	73,662	140,620
1943 ...	2,065	13,420	34,906	15,869	52,106	118,366
1944 ...	2,315	12,652	34,562	15,196	46,283	111,008
1945 ...	2,387	13,329	43,561	19,650	47,055	125,982
1946 ...	2,815	11,939	62,120	25,370	54,864	157,108
Number per 1,000 of Mean Population.						
1931 ...	0.72	4.58	8.04	6.10	20.34	39.78
1939 ...	0.61	3.99	11.79	5.20	24.39	45.98
1940 ...	0.61	4.11	12.47	5.31	25.08	47.58
1941 ...	0.59	3.59	12.41	4.99	21.32	42.90
1942 ...	0.68	4.41	12.37	6.30	26.14	49.90
1943 ...	0.73	4.72	12.29	5.58	18.34	41.66
1944 ...	0.81	4.45	12.17	5.35	16.29	39.07
1945 ...	0.82	4.59	15.05	6.77	16.23	43.46
1946 ...	0.96	4.08	21.24	8.68	18.76	53.72

Convictions classified under the heading "other offences," consist mainly of breaches of administrative law, *e.g.*, traffic regulations and local government by-laws. A large proportion are minor breaches or are committed through inadvertence or in ignorance of the law, and are met with the infliction of a fine. As local and other administrative activities extend,

such offences become more numerous. The number fluctuated with an upward tendency during the early years of the war, when many cases related to breaches of war-time regulations. There was a marked decline in 1943 and further decrease in 1944 when the number was the lowest since 1938. There was an increase in later years, and, in proportion to population, the number in 1946 was somewhat higher than in 1943.

Convictions under the traffic regulations represent a very large proportion of the "other offences." They numbered 47,001 in 1940, 20,327 in 1944 and 29,200 in 1946.

#### *Coroners' Courts.*

The office of Coroner was established in New South Wales by letters patent dated 1787, and is regulated by the Coroners Act, 1912, which consolidated previous laws.

Every Stipendiary Magistrate has the powers and duties of a coroner in all parts of the State, the Metropolitan Police District being under the jurisdiction of the City Coroner. In districts not readily accessible by magistrates, a local resident, usually a justice of the peace, is appointed coroner.

At the discretion of the Coroner, inquiries are held into the causes of violent or unnatural deaths, into the causes of deaths in gaols or in mines and into the origin of fires causing damage or destruction to property, but inquiries as to cause of deaths may be dispensed with where the Coroner deems inquiry unnecessary. The Coroner may order the attendance of any medical practitioner at the inquest and may direct him to hold a post-mortem examination. On the evidence submitted the Coroner is empowered to commit for trial persons adjudged guilty of manslaughter, murder or arson, and in such cases may grant bail.

In certain cases a jury of six persons may be empanelled to find as to the facts of the case and on their verdict against any person he may be committed for trial. An inquest is held into the cause of every death occurring among prisoners in gaols and lock-ups; in such cases a jury of six is empanelled. Persons apprehended by the police subsequent to the decisions of coroners are charged in the Courts of Petty Sessions.

During 1946, 33 persons were committed for trial by coroners on charges of murder, 44 for manslaughter and 8 for arson.

The coroners held inquiries into the origin of 27 fires in 1946 and found that 7 fires were accidental, 10 were caused wilfully and in 10 cases the evidence was insufficient to indicate the origin.

#### APPELLATE JURISDICTION.

Generally speaking, appellate jurisdiction is exercised, in cases where appeals are authorised by statute, by Courts of Quarter Sessions from Magistrates' Courts, by the Supreme Court from District Courts and Magistrates' Courts, by the High Court of Australia from the Supreme Court, and (in certain cases) by the Privy Council from either of the two last-named courts. Appeal on points of law (usually by stating a case) may be made to the Supreme Court from special courts, *e.g.*, Industrial Commission and Workers' Compensation Commission.

A Court of Criminal Appeal, presided over by Judges of the Supreme Court, was established in 1912.

*Appeals to Quarter Sessions.*

The right of appeal from Courts of Petty Sessions to Courts of Quarter Sessions lies against all convictions or orders by magistrates, excepting adjudication to imprisonment for failure to comply with an order for the payment of money, for the finding of sureties for entering into a recognizance or for giving security. The Appeal Court rehears the cases, and decides questions of fact as well as of law.

*Appeals to the Supreme Court.*

Three or more Judges of the Supreme Court may sit in its various civil jurisdictions to hear appeals from District Courts or from decisions of justices in chambers, and to consider motions for new trials and kindred matters or to hear appeals from orders and decrees made by one justice in the various jurisdictions of the court. One judge may sit in chambers to hear applications for writs of mandamus or prohibition and to determine special cases stated by magistrates. Reference is made on page 966 to the jurisdiction of the Supreme Court in regard to appeals from the Taxation Board of Appeal and against the decision of the Commissioner of Taxation.

*Court of Criminal Appeal.*

The Court of Criminal Appeal was established by the Criminal Appeal Act of 1912, which prescribes that the Supreme Court shall be the Court of Criminal Appeal, constituted by three or more Judges of the Supreme Court as the Chief Justice may direct. Any person convicted on indictment may appeal to the Court against his conviction (1) on any ground which involves a question of law alone, or (2) with the leave of the Court or upon the certificate of the judge of the court of trial, on any ground which involves a question of fact alone, or of mixed law and fact or any other ground which appears to the Court to be sufficient. With the leave of the Court, a convicted person may appeal also against the sentence passed on conviction. In such appeal the Court may quash the sentence and substitute another either more or less severe. The Attorney-General may appeal to the Court against a sentence pronounced by the Supreme Court or any Court of Quarter Sessions.

In addition to determining appeals in ordinary cases the Court has power, in special cases, to record a verdict and pass a sentence in substitution for the verdict and sentence of the court of trial. It may grant a new trial, either on its own motion or on application of the appellant.

*Appeals to the High Court of Australia.*

Appeal to the High Court of Australia from judgments of the Supreme Court of New South Wales may be made in any case by permission of the High Court and as of right in cases involving a matter valued at £300 or more, or involving the status of any person under laws relating to aliens, marriage, divorce or bankruptcy, provided that appeal lay to the Privy Council in such case at the date of establishment of the Commonwealth. Such appeal may be made even if a State law provides that the decision of the Supreme Court is final.

An appeal to the High Court from the Court of Criminal Appeal may be made by special leave of the High Court.

*Appeals to the Privy Council.*

Appeals from Dominion Courts to the Crown-in-Council are heard by the Judicial Committee of the Privy Council by virtue of the royal prerogative to review decisions of all Courts of the Dominions, which can be limited only by Act of Parliament.

The cases which may be heard on appeal by the Judicial Committee were defined by Order-in-Council in 1909. Appeal may be made as of right from determinations of the Supreme Court involving any property or right to the value of £500 or more, and as of grace from the Supreme or High Court in any matter of substantial importance, including criminal cases in special circumstances. Except where the High Court consents, no appeal may be made to the Privy Council upon any question as to the limits *inter se* of the constitutional powers of the Commonwealth or States.

## JURY SYSTEM.

Crimes and misdemeanours prosecuted by indictment in the Supreme Court or Courts of Quarter Sessions must be tried before a jury of twelve persons, who find as to the facts of the case, the punishment being determined by the judge. Most civil cases may be tried before a jury of four persons or a jury of twelve persons, upon application and with the consent of the court. The jury in such cases determines questions of fact and assesses damages. The procedure in relation to juries is governed principally by the Jury Act, 1912, and its amendments, and other Acts regulate special cases.

Persons liable to service on juries included, with certain exceptions, any man above the age of 21 years residing in New South Wales, who had a clear yearly income of £30 or more from real and personal estate or a real or personal estate of the value of £300 or more. As from 1st January, 1948, the property qualification was removed and men entitled to be enrolled as electors for Parliamentary elections became eligible for jury service. Under provisions of the Jury (Amendment) Act passed in December, 1947, but not yet proclaimed, eligibility to act as juror will be extended to women who submit their names for inclusion in jury lists.

The principal exceptions from liability to serve as jurors are foreign subjects, who have not resided in New South Wales for at least seven years, and certain persons attainted of treason or felony. Persons specially exempt include judges, members of Parliament, certain public officers, officers of the public service of the Commonwealth, members of the defence forces, employees of the State Governments, clergymen, barristers, solicitors, magistrates, police officers, doctors, dentists, chemists, schoolmasters, certain employees of banks, incapacitated persons and men above the age of 60 years who claim exemption. Special petty sessions, when summoned to revise jury lists, have authority to exempt any person from jury service on the ground of inconvenience to him or to the public.

A jurors' list is compiled annually in October for each Petty Sessions District by the senior police officer. This list is made available for public inspection, and revised in December before a special petty sessions held before a stipendiary magistrate or by two or more justices.

The jurors summoned to hear an issue are decided by lot. Both accused persons and the Crown have the right to challenge eight jurors in criminal cases, and twenty in capital cases, without assigning reasons. In

civil cases not more than four times the number of jurors required may be summoned, and in striking the jury to try the case twice the number required are drawn from those summoned and one-fourth of that number is struck off by each party to the case.

In criminal cases the verdict of the jury must be unanimous. Where agreement is not reached within six hours, the jury may be discharged and the accused tried before another jury. In civil cases where a unanimous agreement has not been reached after four hours' deliberation the decision of three-fourths of the jury shall be taken as the verdict of all; but if after six hours' deliberation three-fourths of the jury do not concur, the jury shall be discharged and the case may be set down for a new trial.

#### JUDGES, MAGISTRATES AND COURT OFFICERS.

##### *Judges of the Supreme Court.*

Judges of the Supreme Court of New South Wales are styled "Justices," and are appointed by Commission of the Governor on the advice of the Executive Council. No person may be appointed Judge of the Supreme Court unless he is a barrister of five years standing. The judges have power to make rules governing court procedure and to control the admission to practice of barristers and solicitors and to supervise their conduct.

A judge cannot be sued for any act done in the performance of his judicial duties within the scope of his jurisdiction. He holds office "during good behaviour" until the age of seventy years at a salary fixed by statute. By these provisions the judiciary is rendered independent of the executive, but a judge may be removed from office by the Crown on the address of both Houses of Parliament. A judge, including the Chief Justice, is granted on retirement a pension according to his salary and length of service. The judge of the Land and Valuation Court is a puisne judge of the Supreme Court and each member of the Industrial Commission of New South Wales and the Chairman of the Crown Employees' Appeal Board have the same status and rights as such judge.

##### *Judges of the District Court.*

A barrister of five years standing or attorney of seven years standing may be appointed as judge of the District Court by the Governor to exercise the jurisdiction of the Court in districts allotted by the Governor. District Court judges hold office during ability and good behaviour up to the age of 70 years. They may be removed from office by the Governor for inability or misbehaviour, subject first to appeal to the Governor-in-Council. A judge of any District Court is also chairman of every Court of Quarter Sessions in the State. A judge is granted a pension on retirement, the amount of which is dependent on length of service. A judge may not engage in the practice of the legal profession. Members of the Workers' Compensation Commission have the status and rights of a District Court judge.

##### *Officers of the Courts.*

Certain ministerial functions are performed by magistrates and justices in addition to their judicial duties, but special officers are appointed for certain purposes in the administration of justice, viz., Crown Prosecutors to act in Criminal Courts in prosecuting persons accused of indictable

offences, Clerks of Petty Sessions, the Clerk of the Peace and his deputies to act as Clerks for the Courts of Quarter Sessions, Registrars of the Small Debts and District Courts and bailiffs.

In connection with the Supreme Court there are two important officers in addition to those connected with special jurisdictions, viz., the Prothonotary and the Sheriff.

The Prothonotary of the Supreme Court is its principal officer in common law and criminal jurisdiction. He acts as registrar of the Courts of Admiralty and Criminal Appeal. The Prothonotary or his deputy is empowered under rules of the court to transact business usually transacted by a judge sitting in chambers, except in respect of matters relating to the liberty of the subject. The Matrimonial Causes Jurisdiction has its own Registrar who, with the Deputy Registrar, is empowered by the rules of the Court to exercise certain delegated powers formerly performed by the judge of the jurisdiction sitting in chambers.

The office of Sheriff is regulated by the Sheriff Act, 1900. There are a Sheriff and an Under Sheriff. Sheriff's officers are stationed at convenient country centres, where there is a Deputy Sheriff—usually a Stipendiary Magistrate. The functions of the Sheriff include the enforcement of judgments and execution of writs of the Supreme Court, the summoning and supervision of juries and administrative arrangements relating to the holding of courts.

#### *Magistrates.*

Magistrates are appointed from among members of the Public Service unless it is certified by the Public Service Board that no member of the service is suitable and available for such office. Persons so appointed must have attained the full age of thirty-five years, and have passed the prescribed examination in law. They hold office at the pleasure of the Governor.

Within the districts of the Metropolis, Parramatta, Newcastle, Broken Hill, Bathurst, Windsor, Richmond, Ryde, Hornsby and Wollongong the jurisdiction of the Court of Petty Sessions is exercised exclusively by Stipendiary Magistrates.

In country districts jurisdiction in Petty Sessions is exercised by Stipendiary Magistrates wherever convenient and otherwise by honorary justices in minor cases. The designation of the magistrates in country districts was changed from Police to Stipendiary Magistrates in July, 1947.

The jurisdiction of magistrates is explained in connection with Courts of Petty Sessions, and their functions comprise those of Justices of the Peace. In addition, they usually act in country centres as District Registrars in Bankruptcy, Revising Magistrates, Visiting Justices to gaols, Mining Wardens, Coroners and Industrial Magistrates, and exercise delegated jurisdiction under the Liquor Act.

#### *Justices of the Peace.*

Persons of mature age and good character may be appointed as Justices of the Peace by Commission, under the Grand Seal. The office is honorary, and is held during the pleasure of the Crown. No special qualifications in law are required, but appointees must be persons of standing in the community and must take prescribed oaths. Women became eligible for the office under the Women's Legal Status Act, 1918.

The functions of justices are numerous, extending over the administration of justice generally, the maintenance of peace and the judicial duties of the office. The judicial powers are explained in connection with the Courts of Petty Sessions; other duties include the issue of warrants for arrests, issue of summonses, administration of oaths and certification of documents.

On 31st December, 1946, there were 52,392 Justices of the Peace in New South Wales, of whom 3,271 were women.

#### POOR PERSONS' LEGAL EXPENSES.

Under the Poor Prisoners' Defence Act, 1907, a person committed for trial for an indictable offence may apply for legal aid for his defence before the jury is sworn. If the judge or committing magistrate considers that the person is without adequate means and that such legal aid should be supplied, the Attorney-General may arrange for the defence of the accused either by the Public Defender or by some other counsel or attorney, and for payment of expenses of all material witnesses.

The Poor Persons' Legal Remedies Act, 1918, authorises judges to make rules regulating the practice and procedure and the costs and fees payable in respect of proceedings to which poor persons are parties. The Act was suspended by the Legal Assistance Act, 1943, which came into force on 1st July, 1944. It provides for the appointment of a Public Solicitor and lays down the conditions on which legal assistance may be granted.

The Public Solicitor keeps lists of barristers and solicitors who are willing to investigate and report on applications for legal assistance or to act for assisted persons in proceedings. He issues certificates of eligibility for assistance. He may act for an assisted person or may assign a solicitor whose name is on the list so to act.

#### LEGAL PROFESSION.

The legal profession in New South Wales is controlled by rules of the Supreme Court, which prescribe the conditions of entry to the profession, regulate studentships at law and specify the legal examinations which must be passed prior to admission to practice. Separate boards have been established to govern the admission of barristers and of solicitors. Women are eligible for admission.

By the Legal Practitioners Act, 1898-1936, provision has been made for the admission of conveyancers as solicitors and the discontinuance of the grant of conveyancers' certificates; for the examination of accounts of solicitors and conveyancers; and for the establishment and administration of a solicitors' fidelity guarantee fund. The fund is maintained from annual contributions from or levies imposed on solicitors. From it may be paid the amount of pecuniary loss suffered by persons as the result of theft or fraudulent misapplication by a solicitor of any moneys or other valuable property entrusted to him.

Any solicitor duly admitted to practice has the right of audience in all courts of New South Wales. By the Legal Practitioners' Act, 1898-1936, provision is made for the hearing of charges of professional misconduct upon the part of solicitors by the Statutory Committee of the Incorporated Law Institute of New South Wales, which has the power to make an order

striking off the roll; suspending from practice or imposing a fine on any solicitor. There is also provision for an appeal to the Court from an order of the Statutory Committee.

Barristers have, in general, no legal right to fees for their services in court, but scales of charges for certain services rendered by solicitors are prescribed by regulation and in certain instances costs of suits are taxed by an officer of the Supreme Court.

The following table shows the number of members of the legal profession in practice at intervals since 1931.

TABLE 833.—Barristers and Solicitors, 1931 to 1946.

End of Year.	Barristers.	Solicitors.		
		Sydney.	Country.	Total.
1931 ...	236	1,013	568	1,581
1939 ...	285	1,118	647	1,765
1940 ...	278	1,149	634	1,783
1941 ...	282	1,160	626	1,786
1942 ...	287	1,159	605	1,764
1943 ...	289	1,162	596	1,758
1944 ...	308	1,149	583	1,732
1945 ...	318	1,130	590	1,720
1946 ...	319	1,128	600	1,728

The number of barristers at the end of 1946 included 35 King's Counsel. The number stated in the table does not include the District Court judges, the Master in Equity, magistrates, State officials who are barristers, non-practising barristers, nor those on the roll—but not resident—in New South Wales. There were also 27 certificated conveyancers.

Barristers are organised under the New South Wales Bar Association, and solicitors under the Incorporated Law Institute of New South Wales. There is also a Society of Notaries.

#### PUBLIC TRUSTEE.

The Public Trustee exercises administrative functions in regard to estates in terms of the Public Trustee Act, 1913-1942. The Public Trustee may act as trustee under a will, or marriage or other settlement; executor of a will; administrator under a will where the executor declines to act, is dead or absent from the State; administrator of intestate estates; and as agent or attorney for any person who authorises him so to act. In general the Public Trustee takes out probate or letters of administration in the Probate Court in the ordinary way, but he may file an election to administer in that court in certain cases in testacy or intestacy where the gross value of the estate does not exceed £600. He may act also as manager, guardian or receiver of the estate of an insane or incapable person, or as guardian or receiver of the estate of an infant. He is a *corporation sole* with perpetual succession and a seal of office and is subject to the control and orders of the Supreme Court.

Where the net value of an intestate estate does not exceed £200, the Public Trustee may pay the whole amount direct to the widow, and he



may apply the share of an infant, not exceeding £500, to the maintenance of the infant. As attorney or agent he may collect rents or interest on investments, supervise repairs, prepare taxation returns, and pay taxes, etc. Agents of the Trustee are appointed in towns throughout the State.

Operations are not conducted for profit; fees and commission are chargeable to provide for working expenses and may be supplemented, if necessary, by transfer from interest earnings on current accounts of estates. The accounts of the Public Trust Office are audited by the Auditor-General.

In addition to functions under the Public Trustee Act, the Public Trustee administers the funds of the Destitute Children's Asylum, the Matraville Soldiers' Settlement and the sale of land under the Local Government Act for the non-payment of rates. The Public Trustee has also the responsibility of administering the National Relief Fund of New South Wales.

The following is a summary of the transactions of the Public Trust Office during 1938-39 and the last four years. Operations in respect of the National Relief Fund are not included.

TABLE 834.—Public Trust Office—Transactions, 1938-39 to 1945-46.

Particulars.	Year ended 30th June.				
	1939.	1943.	1944.	1945.	1946.
Estates received for Administration ...	2,208	2,457	2,456	2,250	2,295
Trust Moneys—	£	£	£	£	£
Amount Received ...	1,886,765	1,593,975	1,888,355	1,843,162	1,824,264
Amount Paid ...	1,818,712	1,548,193	1,978,159	1,880,435	1,984,212
Commission and Fees, etc.* ...	79,251	74,044	74,489	80,244	88,420
Office Administration ...	66,298	74,044	74,489	80,244	88,420
Unclaimed Money—					
Paid into Treasury ...	4,867	4,878	1,943	61,410	5,563
Subsequently Claimed ...	1,317	36			
Values of Estates in active Administration ...	6,803,350	7,282,160	7,521,706	7,692,270	7,912,027

\* Office Revenue.

The cost of the administration of the Public Trust Office amounted to £88,420 in 1945-46.

#### REGISTRATION OF LEGAL DOCUMENTS, ETC.

The Registrar-General in New South Wales registers certain occurrences and transactions of special legal significance as prescribed by Acts of Parliament. Registrations are made of births, deaths and marriages; conveyances, transfers, leases, mortgages and other deeds or instruments evidencing title to land; dealings with land under the Real Property Act; crop, stock and wool mortgages and liens; companies, business names and bills of sale; and instruments under the Newspapers and Printing and certain other Acts.

The registers and certain of the documents relating to registration in the Deeds and Land Titles Branches are usually available for inspection by the public. Fees are charged for registration and inspection. No fees are charged for registration of births, deaths and marriages, but fees are payable for certified copies of entries in the registers, which are not available for inspection by the public.

The amount collected by the Registrar-General during 1946 was £235,698, of which £158,804 was collected by the Lands Titles Branch, £64,805 by the Deeds Branch, and £12,089 by the Births, Deaths and Marriages Branch.

#### COURTS OF FEDERAL JURISDICTION.

By the Commonwealth Judiciary Act, 1903-1946, jurisdiction under federal laws is vested in the courts of the States within the limits of their several jurisdictions, as to locality, subject-matter, etc. Justices of the Peace, however, are excluded from exercising federal jurisdiction. Bankruptcy jurisdiction under federal legislation is conferred on the Supreme Court of New South Wales. A Federal Court of Bankruptcy was constituted in 1928.

There are two Commonwealth courts which possess certain jurisdiction, exclusive of State courts, viz., the High Court of Australia and the Commonwealth Court of Conciliation and Arbitration. An account of the latter court is given in the chapter of this volume entitled "Industrial Arbitration."

The High Court of Australia, established in 1903, consists of a Chief Justice and six justices. Its principal seat is at Melbourne, Victoria, but sittings are held in the various States, and district registrars have been appointed in the capital cities. The jurisdiction of the High Court, which may be exercised in the first instance by one judge, is exclusive of the jurisdiction of the several courts of the States with regard to suits between States or between any State and the Commonwealth, matters arising directly under a treaty or matters in which a writ of mandamus or prohibition is sought against an officer of the Commonwealth or a federal court. The High Court has jurisdiction to hear certain appeals from the decisions of State courts.

The Federal Court of Bankruptcy consists of one or two Judges appointed by the Governor-General by Commission.

#### BANKRUPTCY.

Bankruptcy law and procedure in New South Wales were virtually codified by a consolidating Act passed in 1898. The State law has been superseded by the Commonwealth Bankruptcy Act, 1924-1945, which came into force on 1st August, 1928, and the State Act applies only to proceedings prior to and pending at 1st August, 1928.

The Commonwealth has been divided into bankruptcy districts which conform generally with State boundaries. Certain State courts have been invested with Federal jurisdiction for bankruptcy purposes. In addition a Federal Court of Bankruptcy has been created and this court exercises jurisdiction in the bankruptcy districts of New South Wales (which includes the Australian Capital Territory) and Victoria.

An Official Receiver for each bankruptcy district and an Inspector-General for the Commonwealth have been appointed.

Under the present bankruptcy law any person unable to pay his debts may voluntarily file his petition in the Court of Bankruptcy for the sequestration of his estate, or his creditors may apply for a compulsory sequestration provided the debts to the petitioning creditors or creditor amount in the aggregate or singly to £50, or the debtor may surrender

his estate under Parts XI or XII of the Bankruptcy Act. Provision is made for the postponement and payment by instalments of fees payable by a debtor on filing his own petition for relief against creditors pressing him in case of hardship. Upon the issue of an order for sequestration the property of the bankrupt vests in the official receiver named in the order, and no creditor, to whom the bankrupt is indebted in respect of any debt provable in bankruptcy, has any remedy against the property or person of the bankrupt except by leave of the Court. After sequestration of his estate a bankrupt may compound with his creditors or enter into a scheme of arrangement, subject to the approval of the Court.

The Court has power to decide questions of priorities and other questions of law affecting a bankrupt estate. Questions of fact may be tried before a jury.

The Registrar in Bankruptcy has such duties as the Attorney-General of the Commonwealth directs, or as are prescribed, and he exercises powers of an administrative nature, delegated by the Court. He may hear debtors' petitions, make full examination of bankrupts or of persons suspected to be indebted to a bankrupt, and make sequestration orders on debtors' petitions. Stipendiary magistrates are appointed deputy registrars in country districts.

All sequestrated estates are vested in the Official Receiver, who is a permanent officer of the Commonwealth Public Service. His duties have relation to the conduct of a debtor and the realisation and administration of his estate. He acts under the general authority of the Attorney-General and is controlled by the Court.

Persons registered by the Court as qualified to act as trustees may be appointed by resolution of the creditors to be trustees of estates. In cases where a registered trustee under a deed of arrangement or composition, etc. (Parts XI and XII of the Bankruptcy Act) is removed from or vacates his office, the Official Receiver assumes the position and completes the administration of the estate unless the creditors appoint another registered trustee.

Particulars of the operations in New South Wales under the Bankruptcy Act of the Commonwealth are shown in the chapter of this Year Book relating to Private Finance.

#### REGISTRATION OF PATENTS, TRADE MARKS, DESIGNS AND COPYRIGHTS.

The registration of patents, trade marks, designs and copyrights devolves upon the federal authorities. Patents are granted under the Commonwealth Patents Act, 1903-1946, in respect of the Commonwealth of Australia, Norfolk Island and the territories of Papua and New Guinea. The term of a patent is sixteen years, subject to the payment of renewal fees, the first being due before the expiration of the fifth year of the patent and the remainder annually thereafter.

Under the Trade Marks Act, 1905-1936, a trade mark is registered for a period of fourteen years, but may be renewed from time to time on payment of the prescribed fee and on proof of substantial use during the period of registration.

Under the Designs Act, 1906-1934, the registration of a design subsists for a period of five years, and may be extended for two further terms of five years each.

Copyright in a literary, dramatic, musical or artistic work or the performing right in a musical or dramatic work extends for the life of the author and fifty years after his death. The British Copyright Act, subject to certain modifications, is in force under the Copyright Act, 1912-1935.

It is provided in the respective Acts that application may be made to the High Court or the Supreme Court for the revocation of a patent, and rectification of the registers of trade marks, designs and copyright.

#### EXTRA-TERRITORIAL SERVICE AND EXECUTION—FUGITIVE OFFENDERS.

By the Service and Execution of Process Act of the Commonwealth, civil process commenced in any State of the Commonwealth may be served in any other State and judgment obtained in any State may be enforced in any other State. In criminal proceedings, a warrant issued in one State for the apprehension or commitment of a person and endorsed by a Justice of the Peace in another State may be duly executed in the latter State and is sufficient authority for the apprehension of the person named in the warrant.

Special arrangements governing fugitive offenders as between different parts of the British Empire are made in terms of the Imperial Fugitive Offenders Acts, 1881 and 1915.

Extradition to foreign countries is governed by the Imperial Extradition Acts, 1870 to 1932, and the Extradition Act, 1903-1934 of the Commonwealth, or local Acts in pursuance of treaties concluded with the countries concerned by the Imperial Government though since 1930 the right of the Australian Government to enter into such treaties on its own account, subject to certain conditions, has been conceded.

## POLICE.

The police force of New South Wales is organised under the Police Regulation Act of 1899 and amendments. The Commissioner of Police, under direction of the Premier, is charged with the superintendence of police and is responsible for the organisation, discipline, and efficiency of the force. The Commissioner of Police may be removed from office for incompetence or misbehaviour by resolution of both Houses of Parliament and he must retire on attaining the age of 65 years. Superintendents and inspectors of police are appointed by the Governor as subordinates of the Commissioner. Sergeants and constables are appointed by the Commissioner, but such appointments may be disallowed by the Governor.

No person may be appointed constable unless he is of sound constitution, able-bodied, under the age of 30 years, of good character and able to read and write. In practice, however, persons over 27 years of age are not considered to be eligible and preference is given to young men between 20 and 24 years of age. A high physical standard is required of recruits. Any person who has been convicted of a felony, is in other employment or keeps a house for the sale of liquor may not act as an officer of police.

Youths between 16 and 19 years of age may be appointed as police cadets and a comprehensive course of training is provided for them. At 31st December, 1946, there were 172 cadets in training.

The Police Department controls a wireless station and an auxiliary receiving station; a radio telephony system is in operation for communication with patrols throughout a wide area.

Pension and gratuity rights accrue to officers who retire by reason of medical unfitness for duty or on or after attaining the age of 60 years. Where an officer is disabled or killed in the execution of his duty, a special allowance not exceeding his salary at the time of disablement may be paid to him or his dependants. Particulars of the pension fund are shown in the chapter entitled "Social Condition."

The primary duties of the police are to prevent crime, to detect offenders and to bring them to justice, to protect life and property, to enforce the law and to maintain peace and good order throughout the State. In addition, they perform many duties in the service of the State, *e.g.*, they act as clerks of petty sessions in small centres, as Crown land bailiffs, foresters, mining wardens, inspectors under the Fisheries and other Acts, and they collect a large volume of statistical returns. In the metropolitan area and Newcastle the police regulate the street traffic. Their work in connection with motor transport is described in the chapter entitled "Motor and Other Licensed Vehicles." An auxiliary section of police termed "parking police," consisting of partially disabled ex-servicemen, was established in 1946 for the enforcement of traffic parking regulations; parking police wear distinctive uniforms.

The State is divided into seven superintendent's districts containing 427 police stations. The strength of the police force, including cadets, police women, trackers, parking police, etc., was 4,109 at 31st December, 1946. A classification is shown below:—

TABLE 835.—Police—Classification, 31st December, 1939 to 1946.

Classification.	1939.	1942.	1943.	1944.	1945.	1946.
General ... ..	3,036	2,933	2,851	2,739	2,849	3,066
Criminal Investigation Branch ...	121	180	182	204	197	209
Others on detective work ...	224	241	252	250	256	241
Traffic ... ..	361	260	240	218	145	231
Water ... ..	23	19	17	20	21	23
Total of Foregoing ... ..	3,765	3,633	3,542	3,431	3,468	3,770
Cadets ... ..	128	118	121	152	194	172
Police Women ... ..	8	14	18	19	18	25
Matrons ... ..	4	4	4	4	4	4
Trackers and Cadet Trackers... ..	12	18	18	17	19	21
Special Constables ... ..	6	52	30	28	30	26
Parking Police ... ..	...	...	...	...	...	91
Total ... ..	3,923	3,839	3,733	3,651	3,733	4,109

The following statement shows for various years since 1931 the strength of the police establishment (exclusive of cadets, special constables, police women, matrons, trackers and parking police) in relation to the population:—

TABLE 836.—Police Force in relation to Population, 1931 to 1946.

Year.	Number of Police.	Inhabitants to each Policeman.	Year.	Number of Police.	Inhabitants to each Policeman.
1931	3,646	704	1943	3,542	805
1939	3,765	734	1944	3,431	841
1940	3,774	737	1945	3,468	830
1941	3,708	756	1946	3,770	780
1942	3,633	780			

The strength of the police force has been increased by 124 men since 1931 and at the end of 1946 there was about one police officer in New South Wales to every 780 inhabitants. There has been a considerable growth in the volume of administrative work done by the police apart from any extension of duties arising from the increase in the number of inhabitants.

A comparative statement of the annual cost of police services is shown below:—

TABLE 837.—Cost of Police Services, 1936-37 to 1945-46.

Year ended 30th June.	Payments from Consolidated Revenue Fund.				Payments from Road Transport Funds.		Total Expenditure.
	Salaries	Contributions to Superannuation Fund.	Other	Total.	Contributions to Superannuation Fund.	Other.	
	£	£	£	£	£	£	£
1937 ...	1,026,914	234,930	307,358	1,569,202	239,104		1,808,306
1938 ...	1,102,309	219,800	347,446	1,669,555	44,100	282,209	1,995,864
1939 ...	1,097,043	202,100	352,918	1,652,061	44,100	288,850	1,985,011
1940 ...	1,127,973	214,500	356,696	1,699,169	47,450	307,975	2,054,594
1941 ...	1,131,334	218,500	348,394	1,698,228	47,450	314,725	2,060,403
1942 ...	1,113,628	240,699	317,367	1,671,694	22,301	314,725	2,008,720
1943 ...	1,220,890	192,550	315,135	1,728,575	47,450	284,025	2,060,050
1944 ...	1,270,613	221,000	345,552	1,837,165	29,615	209,395	2,076,175
1945 ...	1,231,444	236,000	380,661	1,848,105	29,615	209,395	2,087,115
1946 ...	1,289,306	252,600	415,236	1,957,142	29,615	223,568	2,210,325

Expenditure from funds administered by the Department of Road Transport, as shown above, relates to police services in the supervision and control of road traffic. Expenses under this head include salaries, cost of uniforms, contributions to the Police Superannuation Fund in respect of traffic police, etc.

## PRISONS.

A prison may be established by proclamation of the Governor, at any premises prepared and maintained as a prison at the public expense. A Comptroller-General is appointed by the Governor for the care of prisons and custody of convicted prisoners. Persons in custody not being prisoners under sentence for an indictable offence or adjudication of imprisonment for some offence punishable on summary conviction are held by the Comptroller-General for the Sheriff, as also are prisoners under sentence of death.

All prisons must be visited at least once a week by a magistrate appointed to be "Visiting Justice," who may enter and inspect and report to the Chief Secretary upon any matter connected with the gaol as often as he deems necessary. Such justice may hear and determine complaints against prisoners and award a term of solitary confinement as punishment. Any judge of the Supreme Court may visit and examine any prison at any time.

At 30th June, 1946, there were 14 gaols in New South Wales. Six were classed as principal gaols, one as minor, six as special establishments and one as a police gaol. The principal gaols were the State Penitentiary for men and the State Reformatory for women—both at Long Bay, Sydney—the Goulburn Reformatory and the gaols at Parramatta, Bathurst and Maitland. Each of these gaols is used for a particular class of prisoners.

The State Penitentiary, Long Bay, is used for the detention of persons awaiting trial at metropolitan courts. The majority of prisoners convicted in the metropolitan area are lodged in the State Penitentiary in the first instance, the short sentence men being retained and those serving longer periods of imprisonment being drafted to country establishments. Facilities are provided at Long Bay for the observation and treatment of prisoners suffering from mental or physical defects. The State Reformatory is used for female prisoners of all classes. Special treatment is provided for first offenders at the Goulburn Reformatory, and prisoners convicted more than once are imprisoned at Bathurst and Parramatta.

The smaller gaols are used for prisoners undergoing short sentences and for the detention of those who require special treatment apart from other long-sentence prisoners. The special establishments are the Afforestation Camps at Glen Innes, Oberon, and Manus, the Emu Plains Prison Farm, Berrima Prison Camp and Grafton Gaol. At the Prison Farm, prisoners—usually first offenders under 25 years of age—are trained in farm work; at Glen Innes older men are employed on a pine plantation and similar work is provided at the other afforestation camps for prisoners of the several classes; at Berrima, prisoners are rebuilding the gaol premises. At these establishments the conditions of gaol life are modified with the object of fitting the men to lead useful lives after release, and for this reason the prisoners sent to the camps are selected with discrimination. Prisoners guilty of frequent misbehaviour in other gaols are sent to Grafton Gaol.



The police gaols are used for the detention of persons sentenced in the various districts for periods not exceeding fourteen days, whose removal to the established gaols would involve undue expense in consequence of the shortness of the term of imprisonment.

In the larger gaols the prisoners are classified according to character and previous record, and the principle of restricted association is in operation.

Libraries in prisons contained 14,952 volumes at 30th June, 1946.

## PRISONERS.

The number of gaol entries during various years since 1931 and the number of prisoners in gaol at the close of each year are shown below. The figures are exclusive of persons detained under the Inebriates Act:—

TABLE 838.—Prisons—Numbers of Prisoners, 1930-31 to 1945-46.

Year ended 30th June.	Number of Gaol Entries during Year.	Prisoners under Sentence.							
		Received during Year.				In Prison at end of Year.			
		Males.	Females.	Total.	Per 10,000 of Population.	Males.	Females.	Total.	Per 10,000 of Population.
1931 ...	12,731	8,863	1,264	10,127	39.8	1,628	63	1,691	6.6
1939 ...	10,636	7,642	753	8,395	30.7	1,314	50	1,364	5.0
1940 ...	11,130	7,798	887	8,685	31.4	1,296	61	1,357	4.9
1941 ...	10,271	7,030	1,063	8,093	29.0	1,189	47	1,236	4.4
1942 ...	10,662	7,367	813	8,180	29.1	1,414	83	1,497	5.3
1943 ...	9,919	6,095	871	6,966	24.5	1,419	139	1,558	5.5
1944 ...	9,699	5,976	923	6,899	24.0	1,578	161	1,739	6.0
1945 ...	9,874	6,291	886	7,177	24.7	1,714	142	1,856	6.4
1946 ...	10,562	6,770	896	7,666	26.1	1,598	80	1,684	5.7

The number of gaol entries shown in the table includes convicted persons, persons awaiting trial, debtors, naval and military offenders and persons on remand, some of whom were received and counted several times.

The number of persons received into prison under sentence in 1945-46, counted once each time received, was 7,666, viz., males 6,770 and females 896, showing an increase of 479 in males and 10 in females as compared with the preceding year. The number of prisoners received into gaol under sentence per 1,000 of the population was 2.6 in 1945-46.

The number of distinct persons received into gaol under sentence in 1945-46 was 5,458, of whom 540 were women:

The age distribution of persons received into prison under sentence (counted each time received) in 1938-39 and the last five years is shown below:—

TABLE 839.—Prisoners—Ages\* of Prisoners Received, 1938-39 to 1945-46.

Age Group.	Prisoners received during year ended 30th June —					
	1939.	1942.	1943.	1944.	1945.	1946.
Under 21 years ...	785	733	992	978	931	1,058
21 to 24 years ...	882	705	796	857	879	1,033
25 to 29 years ...	1,059	956	770	853	808	911
30 to 39 years ...	1,919	1,665	1,262	1,266	1,353	1,472
40 to 49 years ...	2,074	1,932	1,420	1,381	1,500	1,518
50 years and over ...	1,664	2,176	1,718	1,560	1,706	1,674
Age not stated ...	12	13	8	4	...	...
Total ...	8,395	8,180	6,966	6,899	7,177	7,666

Prisoners under the age of 25 years, counted each time received into gaol during the year, represented 19.9 per cent. of the total in 1938-39 and 27.3 per cent. in 1945-46.

The sentences imposed on 55 per cent. of the male prisoners, and on 69 per cent. of the females received during 1945-46, did not exceed one month. Of the total number committed to gaol, 6,512 or 85 per cent., were received from lower courts; 344, or 4 per cent., from court martials and Commonwealth courts and 810, or 11 per cent., from higher courts. The number of persons committed to prison in default of payment of fines was 3,806.

Particulars of the sentences imposed on prisoners received into gaol during each of the last five years are as follows:—

TABLE 840.—Prisoners—Sentences, 1941-42 to 1945-46.

Sentences.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
One week and under ...	3,372	2,409	2,270	2,482	2,567
Over one week to one month ...	2,130	1,471	1,349	1,523	1,791
Over one month to six months ...	1,826	1,947	1,948	1,707	1,900
Over six months to one year .....	240	339	538	447	421
Over one year to two years ...	219	284	281	489	375
Over two years to five years ...	91	142	141	116	105
Over five years to ten years ...	17	9	16	12	20
Over ten years ...	1	2	1	1	1
Governor's pleasure ...	...	3	1	1	4
Life ...	3	2	2	9	...
Death ...	10	6	2	4	2
Term not specified ...	271	352	350	386	480
Total ...	8,180	6,966	6,899	7,177	7,666

The daily average number of prisoners under sentence during the year ended 30th June, 1946, was 1,935.

The prisoners remaining in gaol under sentence on 30th June, 1946, numbered 1,684, including 79 serving life sentences, and 46 who had been declared habitual criminals to be detained for an indefinite period. There

are in mental hospitals 4 habitual criminals who are not included in prison figures.

Capital punishment may be inflicted in New South Wales, but executions are unusual. Since the beginning of the year 1918 there have been seven executions—two in 1924, one in 1932-33, two in 1935-36, and one in each of the years 1937-38 and 1939-40.

The system of indeterminate sentences was introduced in terms of the Habitual Criminals Act, 1905, which empowers a judge to declare as an habitual criminal any person convicted for the third or, in some cases, the fourth time of certain criminal offences, as specified in the Act. The declarations were made only in the case of convictions on indictment until the Act was amended in 1924 to extend the system to persistent offenders, who are convicted summarily. In such cases a stipendiary magistrate may direct that an application be forwarded to a Judge of the Supreme Court or a Court of Quarter Sessions to have the prisoner declared an habitual criminal.

The habitual criminal serves the definite sentence imposed for the offence of which he has been convicted. Then he is detained for an indefinite term until he is deemed fit for freedom. The indeterminate stage is divided into three grades—intermediate, higher, and special. A minimum period of 4 years 8 months must be spent in the lower grades before the prisoner can gain admission to the special grade, wherein cases may be brought under consideration with a view to release on license. After release he is required to report to the authorities at stated intervals during a period specified in the license.

The cases of all habitual criminals are considered at quarterly intervals by a consultative committee appointed for the purpose and each case is brought annually under the notice of the Minister of Justice.

The Habitual Criminals Act prescribes that while under detention as an habitual criminal every prisoner must work at some useful trade and receive a share of the proceeds of his work. As the majority of these persons have not been trained in any branch of skilled labour, facilities are afforded them, while serving the definite term, to acquire training in some remunerative employment.

Nineteen men were declared habitual criminals during the year ended 30th June, 1945, and six in the following year. At 30th June, 1946, there were under detention 12 men who had not yet completed the definite period of their sentence and 46 men who had passed into the indeterminate stage.

Among the special classes of prisoners are those known as "maintenance confinees," who have been imprisoned for disobeying orders of the courts for the maintenance of their wives and children. Such prisoners are required to work, and the value of the work, after deducting the cost of the prisoner's keep, is applied towards the satisfaction of the orders for maintenance, etc.

The number of maintenance confinees received into gaol was 294 in 1944-45 and 334 in 1945-46. Gaol earnings to the amount of £1,220 were paid to dependants of confinees in the latter year. One hundred and seventy-two confinees paid the amount of their order from gaol earnings and 91 partly from gaol earnings. The number in gaol on 30th June, 1946, was 55.

*Sickness and Mortality in Gaols.*

The medical statistics of prisons show that, with an average daily number of 1,935 inmates during 1945-46, the total number of cases of sickness treated in hospital was 196. Seven prisoners died and 16 were released on medical grounds.

Cases of venereal diseases amongst prisoners are treated in lock hospitals as shown in the chapter entitled "Social Condition."

## BIRTHPLACES, RELIGIONS, AND EDUCATION OF PRISONERS.

Of the prisoners under sentence on 30th June, 1946, 69 per cent. were natives of New South Wales, 15 per cent. were born in other States of the Commonwealth, 11 per cent. came from the British Isles and the remainder were chiefly Europeans.

The distribution of prisoners serving sentences at 30th June, 1946, according to birthplace and religion, was as follows:—

TABLE 841.—Prisoners—Birthplaces and Religions, 1946.

Birthplace.	Males.	Fe- males.	Total.	Religion.	Males.	Fe- males.	Total.
New South Wales ...	1,104	61	1,165	Church of England ...	614	38	652
Other Australian States ...	241	15	256	Roman Catholic ...	527	33	560
New Zealand ...	21	...	21	Methodist ...	67	1	68
England and Wales ...	131	6	137	Presbyterian ...	82	10	92
Scotland ...	39	1	40	Other Christian ...	57	4	61
Ireland ...	19	...	19	Non-Christian ...	13	...	13
Other British ...	16	...	16	No religion ...	238	...	238
Foreign Countries ...	27	3	30				
Total ...	1,598	86	1,684	Total ...	1,598	86	1,684

Six prisoners were illiterate, 9 could read but not write English, and 4 could read and write in a foreign language only.

## REMISSION OF SENTENCES.

*First Offenders.*

Special provision is made by the Crimes Act, 1900, and its amendments, for lenience towards any person convicted of a minor offence and sentenced to imprisonment, provided such person has not been convicted previously of an indictable offence. The term "minor offence" includes offences punishable summarily and any other offence to which the court applies these provisions of the Act. In such cases the execution of the sentences is suspended upon the defendant entering into recognizance to be of good behaviour for a fixed period, which may not be less than twelve months.

The hearing of charges against female first offenders, except cases of larceny in retail shops, must be in private unless the defendant elects to be heard in open court, and reports of such cases may not be published.

*Prisoners released on Probation.*

By good conduct and industry certain classes of prisoners may gain the remission of part of their sentences. They are released on license on terms similar to those applied to first offenders as described above.

The licenses operate for the unexpired portion of the sentence, and a breach of the conditions of release may be punished by the cancellation of the license and recommitment to gaol for the balance of the sentence. Licenses under the Crimes Act were granted to 629 men and 29 women during the year ended 30th June, 1946.

#### COST OF MAINTENANCE OF LAW AND ORDER.

The following table shows particulars of expenditure by the State on the maintenance of law and order in New South Wales during 1938-39 and the last four years; also the amount of fines and fees and returns from prisoners' labour paid into Consolidated Revenue.

TABLE 842.—Cost of Maintenance of Law and Order, 1938-39 to 1945-46.

Expenditure and Receipts.	Year ended 30th June.				
	1939.	1943.	1944.	1945.	1946.
<b>Expenditure—</b>	£	£	£	£	£
Salaries, etc., of Judiciary ... ..	78,953	66,541	66,400	67,806	63,794
Administration—Department of Attorney-General and Justice ... ..	551,724	518,939	545,302	550,742	604,785
Police (including Traffic Services) ... ..	1,985,011	2,060,050	2,076,175	2,087,115	2,210,325
Prisons ... ..	264,322	311,710	339,180	377,341	394,075
Custody and Care of Delinquent Children ... ..	95,059	109,070	115,128	128,196	135,728
Total Expenditure ... ..	2,975,069	3,066,310	3,142,185	3,211,200	3,408,707
<b>Receipts—</b>					
Fines and Forfeitures ... ..	69,214	100,525	99,913	107,233	134,523
Fees ... ..	366,814	234,897	231,682	259,411	317,474
Proceeds of Prison Industries, etc. ... ..	64,751	84,363	75,440	89,698	94,404
Commonwealth Payments for Maintenance ... ..	...	...	11,980	16,134	23,111
Other ... ..	11,141	2,341	3,108	2,599	3,234
Total Receipts ... ..	511,920	422,126	422,123	475,075	572,746
Net Expenditure ... ..	2,463,149	2,644,184	2,720,062	2,736,125	2,835,961

Traffic license fees are not included as receipts in the table above, though the cost of police supervision and control of traffic is paid from the Road Transport funds out of the proceeds of such fees.



## POPULATION.

### *The Census.*

THE number and characteristics of the population of New South Wales have been ascertained by census enumerations at intervals since 1828. Musters were held regularly during the first forty years of the existence of the colony, and the first actual census in 1828 was followed by census enumerations in 1833 and 1836, then at intervals of five years until 1861, and thereafter of ten years until 1921. The census which was due in 1931 was postponed for reasons of economy until 30th June, 1933, and because of the war the following census was not taken until 30th June, 1947.

Successive censuses up to 1901 were taken under the authority of the State Government, but upon establishment of the Commonwealth the census became a Federal function. The first Australian census under Commonwealth control was taken in 1911.

### *Intercensal Estimates.*

In the periods between census enumerations the population is estimated at quarterly intervals. Reliable information as to the natural increase is ensured by the compulsory registration of births and deaths, and a careful system of recording arrivals and departures is maintained for purposes of estimation.

In estimating the population of the war years 1914 to 1918, movements of troops were taken into account as migration, but in the war years 1939-45, members of the Australian defence forces were counted in the population of the State of enlistment, regardless of subsequent whereabouts, and statistics of migration were related to civilians only. Deaths of members of the defence forces overseas were taken into account when they were authentically recorded.

Allied defence forces, enemy prisoners of war and internees from overseas were excluded from the population, but refugees and evacuees were included.

### THE GROWTH OF POPULATION IN NEW SOUTH WALES.

#### *From 1788 to 1856.*

The growth of the population of New South Wales between 1788 and 1856 is traced on page 223 of the Official Year Book for 1922, and the area and population at each territorial readjustment are shown on page 1 of this Year Book.

#### *From 1861 to 1943.*

With the exception of the territory ceded to the Commonwealth Government in 1911 and 1915, New South Wales (including Lord Howe Island)

has occupied its present boundaries since 1859. The regular census enumerations furnish a connected summary of the growth of population since that date as shown in the following table:—

TABLE 843.—Growth of Population of New South Wales since 1851.

Census.	Population.	Index Number of Population. (Census 1861 = 100).	Increase in Population since previous Census.			Number of Persons. per Square Mile.
			Numerical.	Proportional.	Average Annual Rate.	
				per cent.	per cent.	
7th April, 1861	350,860	100	168,436*	92.55*	6.76*	1.12
2nd April, 1871	502,998	143	152,138	43.36	3.67	1.62
3rd April, 1881	749,825	214	246,827	49.07	4.07	2.42
5th April, 1891	1,127,137	321	377,312	50.32	4.16	3.63
31st March, 1901	1,355,355	386	228,218	20.25	1.83	4.37
3rd April, 1911	1,646,734	469	291,379	21.50	1.97	5.32
4th April, 1921	2,100,371	599	453,637	27.55	2.46	6.79
30th June, 1933	2,600,847	741	500,476	23.83	1.76	8.41
30th June, 1947	2,984,838	851	383,991	14.76	0.99	9.65

\* Since 1851.

Aboriginals are excluded from the population shown above, but their number as enumerated at various dates is shown in Table 859. The population of the Australian Capital Territory is excluded in 1911 and subsequent years.

Steady growth of population until 1891 was succeeded by little progress during the twenty years 1891 to 1911, due to commercial and industrial stagnation following the crisis of 1893 and a heavy decline in the birth rate. Assisted immigration was in suspense from 1885 until 1905, except for the families of those already assisted by the State to immigrate.

Prosperity began returning early in the twentieth century, and the full weight of the revival was felt in the period 1911 to 1921, when the tide of population turned strongly toward the State. In this decade growth was more rapid than in either of the two immediately preceding it even though the war of 1914-18 caused the birth rate to fall, temporarily stopped immigration, and caused an exodus of men of reproductive ages, many of whom did not return, and notwithstanding deaths in the influenza epidemic of 1919.

The next intercensal period, 1921 to 1933, commenced with a recession from the post-war boom, which was followed by a period of steady progress with revival of immigration until 1928, and ended in years of severe depression and substantial emigration. The gain by natural increase decreased rapidly during the depression, births were fewer and deaths began to increase as a result of the higher proportion of older people in the population.

The return to prosperity between 1933 and 1938 brought no significant acceleration of the rate of growth of population, nor was such an improvement to be expected during the war and early post-war years. Deaths continued to increase slowly throughout the intercensal period and were added to by war losses. The crude birth rate changed very little in post-depression years but births increased to record numbers in the late war years, mainly as a result of war-time marriages. During the intercensal period the net gain by migration was negligible; there was appreciable



pre-war migration of European refugees and the war-time inflow of refugees and evacuees was followed by their post-war repatriation.

The average annual rate of increase in population diminished from 2.46 per cent. (1911 to 1921) to 1.76 per cent. (1921 to 1933) and to 0.99 per cent. (1933 to 1947).

Particulars of the increase in each year since 1933 are shown in Table 846.

The estimated population at the end of each year and the mean population for each year since 1933 are shown in the following table.

TABLE 844.—Population, Annual and Mean, 1933 to 1946.  
(Adjusted in accordance with the preliminary results of the census of 30th June, 1947.)

Year.	Estimated Population at 31st December.			Mean Population.	
	Males.	Females.	Total.	Year Ended 31st December.	Year Ended 30th June.
1933	1,324,945	1,288,691	2,613,636	2,601,807	2,590,840
1934	1,335,450	1,301,115	2,636,565	2,623,784	2,613,173
1935	1,344,857	1,313,381	2,658,238	2,646,008	2,634,688
1936	1,356,234	1,326,325	2,682,559	2,668,516	2,657,062
1937	1,369,484	1,342,369	2,711,853	2,695,626	2,681,537
1938	1,381,422	1,356,149	2,737,571	2,722,722	2,709,974
1939	1,393,798	1,373,068	2,766,866	2,750,617	2,735,778
1940	1,402,696	1,388,659	2,791,355	2,778,328	2,764,660
1941	1,410,805	1,402,555	2,813,360	2,800,900	2,790,490
1942	1,428,067	1,420,411	2,848,478	2,831,415	2,813,718
1943	1,436,519	1,434,544	2,871,063	2,857,894	2,846,148
1944	1,449,933	1,451,498	2,901,431	2,886,576	2,871,808
1945	1,465,114	1,468,322	2,933,436	2,917,823	2,901,849
1946	1,481,172	1,481,760	2,962,932	2,945,724	2,932,806

#### SOURCES OF INCREASE SINCE 1861.

The following statement shows the extent to which natural increase and net immigration contributed to the growth of the population in New South Wales during each intercensal period since 1861.

TABLE 845.—Natural Increase and Immigration, 1861 to 1947.

Intercensal Period.	Numerical Increase.			Average Annual Rate of Increase.		
	Natural.	Net Immigration.	Total.	Natural.	Net Immigration.	Total.
				per cent.	per cent.	per cent.
1861-1871*	106,071	46,067	152,138	2.68	1.24	3.67
1871-1881*	139,722	107,105	246,827	2.48	1.95	4.07
1881-1891*	204,664	172,648	377,312	2.44	2.09	4.16
1891-1901*	230,669	(—) 2,451	228,218	1.90	(—) .02	1.86
1901-1911*	250,140	41,239	291,379	1.71	.30	1.97
1911-1921*	318,945	134,692	453,637	1.79	.77	2.46
1921-1933†	377,321	123,155	500,476	1.36	.47	1.76
1933-1947‡	351,366	32,625	383,991	.91	.09	.99
1861-1947	1,978,898	655,080	2,633,978	2.22	1.23	2.51

\* Period of 10 years.      † Period of 12½ years.      ‡ Period of 14 years.

(—) Denotes net emigration.

Natural increase has been by far the greater factor in the growth of population in New South Wales since 1861, and in spite of a fall in rate, the average annual addition from this source increased in each decade up to 1921. The average annual addition declined in each of the next two intercensal periods, notwithstanding a sharp upturn in number for four years immediately preceding the 1947 census. The annual experience from 1933 to 1946 is shown in Table 846. There are further details of the natural increase on page 72.

Intermittently immigration has provided considerable additions to the population, although in the period of eighty-six and one-quarter years between the censuses of 1861 and 1947, the net immigration amounted to only 655,080 or less than one-quarter of the total increase. Immigration declined so heavily during the 'nineties that between 1892 and 1904 there was a net loss of more than ten thousand inhabitants. The rate of increase due to migration has been very variable; there was considerable gain in the years 1907, 1911 to 1914, and 1924 to 1928, but the subsequent average annual inflow of migrants was very small; the relatively large number in 1942 comprised mostly evacuees.

*Sources of Increase, 1933 to 1946.*

Sources of increase in population in New South Wales (exclusive of aboriginals of full blood) during each year since 1933 were as follows:—

TABLE 846.—Natural Increase and Immigration, 1933 to 1946.

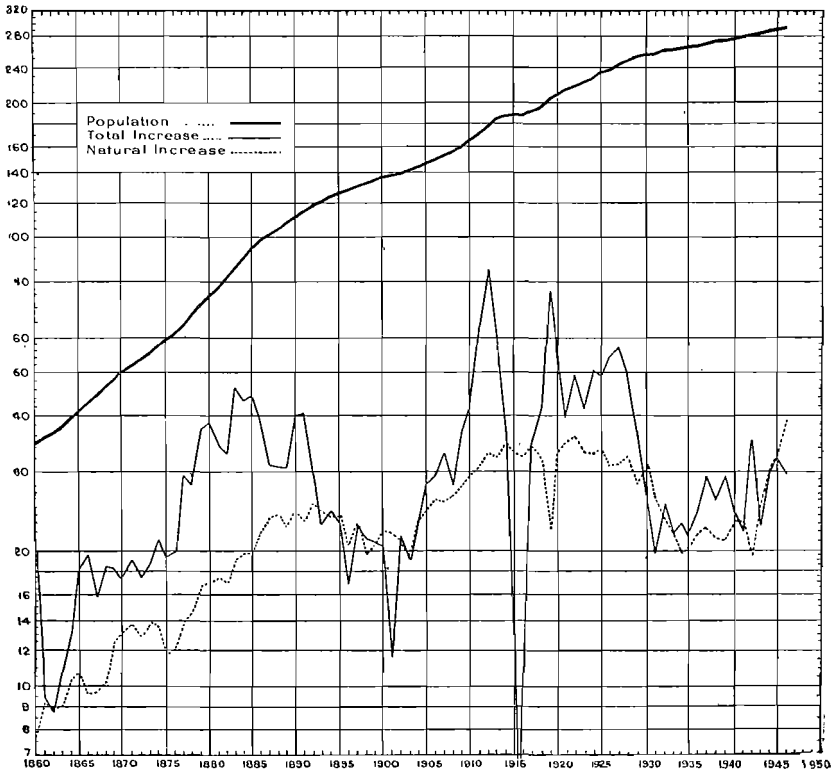
Year.	Numerical Increase.			Annual Rate of Increase.		
	Natural.	Net Immigration.	Total.	Natural.	Net Immigration.	Total.
				per cent.	per cent.	per cent.
1933	21,873	32	21,905	·85	·00	·85
1934	19,861	3,068	22,929	·76	·12	·88
1935	20,129	1,544	21,673	·76	·06	·82
1936	21,817	2,504	24,321	·82	·09	·91
1937	22,262	7,032	29,294	·83	·26	1·09
1938	21,214	4,504	25,718	·78	·17	·95
1939	21,180	8,115	29,295	·77	·30	1·07
1940	23,102	1,387	24,489	·84	·05	·89
1941	23,049	(—) 1,044	22,005	·83	(—) ·04	·79
1942	19,436	15,682	35,118	·69	·56	1·25
1943	25,292	(—) 2,707	22,585	·89	(—) ·10	·79
1944	30,865	(—) 497	30,368	1·08	(—) ·02	1·06
1945	32,146	(—) 141	32,005	1·11	(—) ·01	1·10
1946	38,472	(—) 8,976	29,496	1·31	(—) ·30	1·01

(—) Denotes net emigration.

Net immigration grew rapidly though irregularly from 1921 until 1927, then a decline set in and there was a loss by emigration in 1930 and 1931. The decline was arrested in 1934, and reversed in 1937 under a plan encouraging migrants by the provision of assisted passages. Assisted immigration was interrupted by the outbreak of war in 1939. The net migration for the years 1939 to 1946 represents civilian movements only and reflects mainly the entry and subsequent repatriation of refugee and evacuee persons.

## POPULATION AND ANNUAL INCREASE, 1860 TO 1946.

Ratio Graph.



NOTE.—(i) The numbers at the side of the graph represent 10,000 of population, 1,000 Total Increase and 1,000 Natural Increase.

(ii) In 1916 there was a decrease of 8,711 in the population owing to the departure of troops and the curve fell below the limits of the graph. See text on page 993.

The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the percentage of increase or decrease. Actual numbers are shown by means of the numbers at the side of the graph.

The natural increase in 1922 was, until then, numerically the greatest on record, and in 1934 it was the lowest since 1885, excepting 1898 and 1903. There was some improvement in the next three years due to an increase in births, which was not sustained in 1938 and 1939. In the years 1940 to 1946, the increase in births which followed the war-time increase in marriages, offset war losses and the numerical natural increase almost regained the record level of about twenty years earlier, surpassing it in 1946.

The natural increase shown above represents the excess of births over all deaths. Alternative figures showing the excess of births over civilian deaths only are shown in Table 55.

The rate of natural increase fell below 1 per cent. for the first time in 1932, and there was further decline to .76 per cent. in 1934 and 1935, and to .69 per cent. in 1942, the lowest rate yet recorded. The rate of 1.31 per cent. in 1946 was the highest since 1928.

The total rate of increase in the population in 1941 and 1943 (.79 per cent. in each year) was, next to 1931 (.78 per cent.) the lowest annual rate since New South Wales has been within its present boundaries, disregarding the years of the first World War when the transfer of large numbers of Australian troops overseas was reflected in the estimated population.

Details of migration to and from the State are shown on later pages.

#### DISTRIBUTION OF POPULATION.

At the 30th June, 1947, the city of Sydney contained 95,925 persons in a small area surrounded by an extensive group of suburbs with 1,388,079 inhabitants, making a total of 1,484,004 persons in the metropolis. The large mining and industrial centres of Greater Newcastle and Greater Wollongong had 127,138 and 62,960 persons, respectively, whilst similar though smaller centres were Broken Hill with 27,054 and Lithgow, 14,461. On the outskirts of the Metropolis there were 206,706 persons in the balance of Cumberland Division, a large proportion of whom gain their livelihood in the Metropolis, whilst in the similar though somewhat smaller area around Greater Newcastle—represented by the City of Maitland (19,151), Municipality of Cessnock (13,029), Shire of Lake Macquarie (42,288), and Shire of Kearsley (25,882)—there were 100,350 persons. Thus in the areas mentioned in and around Sydney, Newcastle and Wollongong, there were 1,981,158 persons representing 66 per cent. of the State's population, domiciled in 2,918 square miles which is less than 1 per cent. of the area of the State. Distributed over the remainder of the State—99.1 per cent. of its area—were 996,159 persons, of whom 353,657 lived in towns incorporated as municipalities; and 627,914 were in shire areas with probably more than one-third of these in unincorporated towns of 500 or more persons. Only 14,588 persons were in the unincorporated portion of the Western Division, covering 40.5 per cent. of the area of the State. There were also 179 persons on Lord Howe Island, and a migratory population of 7,342 not geographically assignable.

The distribution of population at the 30th June, 1947, together with the proportion in each division and the average population per square mile, are shown in the following table. Owing to amalgamations of areas and changes in boundaries figures in this table should not be compared with data at earlier dates.

The population of the metropolis, with the residents of adjoining areas who derive their livelihood in the city, represented more than one-half of the State's population. About one-fifth of the people resided in the larger towns including the industrial centres of Greater Newcastle and Greater Wollongong. Less than one-third of the population lived in the rural districts.

In 1947 the density of population in the metropolitan area of Sydney was 6,057 persons per square mile, whilst in the area within the confines of Greater Newcastle it was 3,346 per square mile. That part of County Cumberland outside the metropolitan area had a density of 165, and in the northern coalfields adjacent to Newcastle the average was 91 per square mile within the confines of the local government areas, but probably about 200 per square mile over the settled portions. In the Greater Wollongong area the average was 228 per square mile. The balance of the Coastal division where the principal industry is dairying, had a general average density of less than 11; the most populous portion being

the North Coast with an average of 15 per square mile. In the Tablelands division where mixed farming, mining, and in the central portion industrial activities, are carried on, the density was 6 persons per square mile. The average was 9 in the Central Tablelands. The Western Slopes (mixed farming) had a density of over 5, but in the Plains division, which is for the greater part beyond the western limit of commercial wheat growing, the density was slightly less than 2 persons per square mile, although in the Murrumbidgee Irrigation Area it was 36 per square mile. These areas (from coast to plains) constitute the Eastern and Central Land Divisions of the State and the average density therein was 16 persons per square mile.

TABLE 847.—Distribution of Population in Areas, 30th June, 1947.

Division.	Area.	Population (excluding full blood Aborigines).		
		Total.	Proportion in each Division.	Average per sq. mile
	sq. miles.		per cent.	
Sydney ... ..	5	95,925	3.2	19,185.0
Suburbs of Sydney ... ..	240	1,388,079	46.5	5,783.7
Metropolis ... ..	245	1,484,004	49.7	6,057.2
Balance of Cumberland ... ..	1,252	206,706	6.9	165.1
Greater Newcastle ... ..	38	127,138	4.3	3,345.7
Newcastle-Maitland Coalfields* ... ..	1,107	100,350	3.4	90.7
Greater Wollongong† ... ..	276	62,960	2.1	228.1
Other Municipalities ... ..	1,056	353,657	11.9	334.9
Other Shires ... ..	180,051	627,914	21.0	3.5
Unincorporated Area of Western Division ... ..	125,369	14,588	.5	.1
Lord Howe Island ... ..	5	179	.0	35.8
Migratory‡ ... ..	...	7,342	.2	...
Harbours and Quarantine§ ... ..	34	...	...	...
Total, New South Wales	309,433	2,984,838	100.0	9.6

\* Municipalities of Maitland and Cessnock and Shires of Kearsley and Lake Macquarie.

† Municipalities of Wollongong and Illawarra North and Shires of Bulli and Illawarra Central.

‡ Shipping, railway and air travellers.

§ Portions in Coastal Divisions not included within Municipal or Shire boundaries.

The extensive Western Division is likely to remain sparsely settled unless means are found to overcome the natural disability of a low average rainfall. At Broken Hill (near the far western border) rich silver-lead deposits support the fourth largest town in the State. The remainder of the division is under sparse pastoral occupation, and outside the incorporated towns had an average density of only one person to every 8 square miles.

The average density of population in New South Wales was 9.6 persons per square mile.

#### *Urban and Rural Population.*

The population of New South Wales, in common with that of most other countries of the world, tends to congregate in metropolitan and other urban centres. This is illustrated by comparative statistics recorded at the censuses of 1911 to 1933 which are published in the 1938-39 issue of the Year Book on pages 47 to 52 and the censuses of 1891 to 1921 on

page 236 of the Year Book of 1922. Corresponding data from the census of 1947 will be available for publication in the next edition of the Year Book.

#### THE POPULATION OF THE METROPOLIS.

The metropolis, as constituted for statistical purposes since 1st January, 1933, embraces the City of Sydney, forty-eight other municipalities, portion of another, and the islands of Port Jackson. The municipalities are listed in the following table and comprise the district to which the population and vital statistics of the metropolis relate. The area (exclusive of Port Jackson and the quarantine area, which cover 19 square miles) is 245 square miles. The population was 1,484,004 at 30th June, 1947.

Areas contiguous with the metropolis which contain centres of population more or less suburban in character are listed at the end of Table 848.

The following statement shows the population of each municipality within the present boundaries of the metropolis, and of the contiguous areas mentioned above, at the censuses of 1911, 1921, 1933 and 1947. Shipping population and full blood aborigines are not included.

The population of the metropolis was distributed unevenly. At the 30th June, 1947, the City of Sydney and the inner industrial suburbs, occupying only 9.5 per cent. of the area of the metropolis, contained 21.8 per cent. of the inhabitants. In slightly more than half of this area the density of the population ranged from 26 to 59 persons per acre. On the other hand, the density of the outlying suburbs was little more than one or two persons to the acre, but considerable development is taking place in these areas.

Densities shown above are calculated from total area used for all purposes. Calculated on the basis of land-use the true density in residential areas is much higher and ranges up to 200 per acre in the City and up to 30 per acre in the outer suburbs.

The population of most of the suburbs in the inner industrial area is either stationary or diminishing as dwellings are being replaced by industrial and commercial establishments. Improved transport facilities tend to encourage the movement of population from the more congested areas to the less thickly populated suburbs. Whereas the population in the City of Sydney and the inner industrial suburbs decreased by 5 per cent. between 1921 and 1947 there were proportionate increases in the other groups of suburbs, viz.—Inner western 55 per cent., northern 72 per cent., outer western 82 per cent., eastern 97 per cent., Illawarra-Bankstown 107 per cent., and contiguous areas 182 per cent.

The population in the city and eight of the nearer suburbs of Annandale, Balmain, Glebe, Erskineville, Newtown, Redfern, Darlington and Alexandria, decreased by more than 5,000 between 1911 and 1921, and by more than 33,000 between 1921 and 1933, representing a total decrease of nearly 16 per cent. in the twenty-two and a quarter years. Between 1933 and 1947 the City gained 7,617, but in the nearby eight suburbs there was a loss of 344 persons. On the other hand, the aggregate population of the outlying suburbs of Bankstown, Canterbury, Concord, Dundas, Ryde, Homebush, Lane Cove, Kogarah, Vacluse, Enfield and Randwick, increased from 59,381 in 1911 to 168,237 in 1921, to 311,442 in 1933 and to 405,412 in 1947, or by 583 per cent. in the 36½ years. Despite this marked growth, the density of population in these suburbs in 1947 was only 6.9 persons per acre, compared with 30.2 persons per acre in the city and the eight

adjacent suburbs. On the whole, Sydney has a very low average density of population as compared with other cities of the British Empire.

TABLE 848.—Population of Metropolitan Municipalities, 1911 to 1947.

Municipality.	Population at Census.				Proportional Increase 1911 to 1947.	Average Number of Persons per Acre 1947.
	1911.	1921.	1933.	1947.		
City of Sydney ...	112,921	104,153	88,308	95,925	per cent. (—) 15	29.79
Inner Industrial—						
Alexandria ...	10,123	9,793	9,018	8,060	(—) 20	7.67
Annandale ...	11,240	12,648	12,205	12,396	10	35.83
Balmain ...	32,038	32,104	28,272	28,398	(—) 11	29.07
Botany ...	4,409	6,214	8,287	9,462	115	4.36
Darlington ...	3,816	3,651	3,053	3,032	(—) 21	56.15
Erskineville ...	7,299	7,553	6,645	6,881	(—) 6	36.99
Glebe ...	21,943	22,754	19,874	20,510	(—) 7	39.59
Leichhardt ...	24,254	29,356	30,209	29,462	21	25.51
Mascot ...	5,836	10,929	14,363	17,984	208	8.09
Newtown ...	26,498	28,168	25,290	24,933	(—) 6	51.94
Paddington ...	24,317	26,364	24,674	24,681	1	58.62
Redfern ...	24,427	23,978	18,834	18,637	(—) 24	46.13
St. Peters ...	8,410	12,700	12,554	12,404	47	13.75
Waterloo ...	10,072	11,199	11,659	11,241	12	13.60
Total ...	214,682	237,411	224,937	228,081	6	19.47
Illawarra—						
Bankstown—						
Bankstown ...	2,039	10,670	25,384	42,646	109	2.22
Bexley ...	6,517	14,746	20,539	26,862	312	14.06
Canterbury ...	11,335	37,639	79,050	99,396	777	12.03
Enfield ...	3,444	8,530	14,782	17,231	400	10.29
Hurstville ...	6,533	13,394	22,663	33,939	420	5.55
Kogarah ...	6,953	18,226	30,646	39,298	465	8.18
Marrickville ...	30,653	42,240	45,385	46,866	53	24.81
Rockdale ...	14,095	25,189	39,123	47,290	236	9.27
Total ...	81,569	170,634	277,572	353,528	333	7.22
Inner Western—						
Ashfield ...	20,431	33,636	39,356	44,761	119	21.85
Burwood ...	9,380	15,709	19,373	21,734	132	19.65
Concord ...	4,076	11,013	23,213	29,401	621	11.00
Drummoyne ...	8,678	18,761	29,215	32,985	280	16.63
Homebush ...	676	1,622	3,189	3,501¶	418	5.48
Petersham ...	21,712	26,236	26,941	29,451	36	34.65
Strathfield ...	4,046	7,594	12,147	15,751¶	289	8.58
Total ...	68,999	114,571	153,434	177,584	157	15.95
Outer Western—						
Auburn ...	5,559	13,563	20,114	21,902	294	8.46
Granville ...	7,231	13,328	19,718	26,942	273	6.67
Holroyd* ...	2,082‡	4,626‡	8,426	12,966	523	5.89
Lidcombe ...	5,418	10,522	17,379	20,281	274	3.88
Parramatta ...	12,465	14,594	18,076	20,816	67	9.15
Total ...	32,755	56,633	83,713	102,907	214	6.30

TABLE 848.—Population of Metropolitan Municipalities, 1911 to 1947—  
*continued.*

Municipality.	Population at Census.				Proportional Increase 1911 to 1947.	Average Number of Persons per Acre 1947.
	1911.	1921.	1933.	1947.		
<b>Northern—</b>					per cent.	
Dundas ...	1,136	3,523	6,017	7,635	572	2·80
Eastwood ...	968	2,133	3,025	4,108	324	1·39
Ermington and Kydalmore	1,716	1,981	2,364	3,298	92	1·62
Hunter's Hill ...	5,013	7,300	8,989	11,497	129	8·12
Ku-ring-gai ...	9,458	19,209	27,931	39,874	322	1·97
Lane Cove ...	3,306	7,592	15,138	19,817	499	7·72
Manly ...	10,465	18,507	23,259	33,455	220	10·75
Mosman ...	13,243	20,056	23,665	27,562	108	12·81
North Sydney ...	34,646	48,438	49,752	60,379	74	23·55
Ryde ...	5,281	14,854	27,861	36,418	590	5·23
Willoughby ...	13,036	28,067	42,511	51,945	298	9·48
Total ...	98,268	171,660	230,512	295,988	201	5·67
<b>Eastern—</b>						
Randwick ...	19,463	50,841	78,957	100,931	419	11·89
Vaucluse ...	1,672	3,727	7,205	9,138	447	11·47
Waverley ...	19,831	36,797	55,902	74,800	277	33·66
Woollahra ...	16,989	25,439	34,727	45,122	166	23·94
Total ...	57,955	116,804	176,791	229,991	297	17·17
Total, Metropolis Proper § ...	667,149	971,866	1,235,267	1,484,004	122	9·45
<b>Contiguous Areas—</b>						
Cabramatta and Canley Vale ...	1,181	3,106	6,107	10,966	829	1·40
Fairfield ...	2,226	5,303	8,709	15,987	618	1·00
Holroyd † ...	1,850‡	4,111‡	7,488	11,163	503	1·50
Liverpool ...	3,938	6,302	6,315	12,642	221	·48
Hornsby ** ...	8,901	15,287	22,596	31,816	257	·25
Sutherland ** ...	2,896	7,705	13,525	29,184	908	·32
Warringah ** ...	2,823	9,643	16,054	33,176	1,075	·51
Total ...	23,815	51,457	80,794	144,934	509	·42
Total, Metropolitan and Contiguous Areas ...	690,964	1,023,323	1,316,061	1,628,938	136	3·27

\* Pitt and Merrylands Wards only. † Guildford and Wentworth Wards only. ‡ Estimated.  
§ Present boundaries. ¶ Strathfield and Homebush Municipalities were amalgamated on 23rd May,  
1947, but the census figures are shown for the former areas to preserve comparability. \*\* Shire.

The population of the metropolis proper, excluding aboriginals and ship-  
ping, at each census since 1861, is shown in the following table, together  
with the proportion which the metropolitan population bears to that of the  
whole State.

To permit of more accurate comparison with previous censuses the  
figures for the 1933 census have been shown on the basis of the boundaries  
as they existed before and after 1st January, 1933.



TABLE 849.—Growth of Population of Metropolis since 1851.

Census.	Population.			Increase since previous census.		Proportion of Males to Total Population.	Proportion of Population of State.
	Males.	Females.	Total.	Numerical.	Proportional.		
					per cent.	per cent.	per cent.
7th April, 1861	46,550	49,239	95,789	41,865*	77.64*	48.60	27.3
2nd April, 1871	66,707	70,879	137,586	41,797	43.63	48.50	27.4
3rd April, 1881	112,763	112,176	224,939	87,353	63.49	50.13	30.0
5th April, 1891	193,753	189,580	383,333	158,394	70.42	50.54	34.0
31st March, 1901	236,018	245,812	481,830	98,497	25.69	48.98	35.6
3rd April, 1911	305,728	323,775	629,503	147,673	30.65	48.57	38.2
4th April, 1921	433,492	465,567	899,059	269,556	42.82	48.22	42.8
30th June, 1933†	531,902	585,982	1,117,884	218,825	24.34	47.58	43.0
	‡ 591,104	‡ 644,163	‡ 1,235,267	‡ 336,206	‡ 37.41	‡ 47.85	‡ 47.5
30th June, 1947‡	714,821	769,183	1,484,004	248,737	20.14	48.17	49.7

\* Since 1851.

† Same area as in 1921.

‡ Area as extended on 1st January, 1933.

The tendency of population to concentrate in the metropolis was very marked in the period 1871 to 1921. It slackened appreciably between 1921 and 1933, but gained impetus under war-time conditions.

At the census of 1947 there was an excess of four females in every hundred of the metropolitan population.

Sydney is the third largest city of the British Empire, being exceeded in population by London and Calcutta.

The population of the capital cities (including suburbs) of Australia is shown below:—

TABLE 850.—Area and Population\* of Capital Cities of Australia, 1911 to 1947.

City.	Area at 1947 Census.	Census, 1911.	Census, 1921.	Census, 1933.	Census, 1947.		
		Population.	Population.	Population.	Population.	Proportion to Population of Whole State or Territory.	Average Number of Persons per Acre.
		*	*	*	*	per cent.	
Sydney† ...	156,968	665,067	967,240	1,235,267	1,484,004	49.7	9.5
Melbourne...	198,525	588,971	766,465	991,934	1,226,409	59.7	6.2
Brisbane ...	246,400	139,480	209,946	299,748	402,030	36.3	1.6
Adelaide ...	102,987	189,646	255,375	312,619	382,454	59.2	3.7
Perth ...	122,305	106,792	154,873	207,440	272,528	54.2	2.2
Hobart ...	55,722	39,937	52,361	60,406	76,534	29.8	1.4
Darwin ...	2,880	958	1,399	1,566	2,538	23.4	.9
Canberra ...	26,880	...	899	7,325	15,156	89.7	.6

\* Excluding aboriginals and shipping. † Population within the area embraced by the present boundaries.

## THE CITIES AND TOWNS OF NEW SOUTH WALES.

Many variations in local government areas in New South Wales in recent years increase the difficulties of presenting population data of towns as distinct and individual localities. Convenient data are available only for those towns incorporated as municipalities, taking municipal boundaries as town limits. In the general movement toward larger administrative areas, many former municipalities have been absorbed into shires and, in addition, several extensive "City" areas embracing a number of localities have been created. These are the Cities of Greater Newcastle, Greater Wollongong, Maitland and Blue Mountains. Henceforth these "Cities" will be treated as single centres of population.

Development of iron and steel works and subsidiary industries in association with coal-mining has led to the growth of two important industrial centres outside the metropolis. Greater Newcastle, the larger, with a population in 1947 of 127,138, ranks as the second largest town in the State, and next to it is Greater Wollongong with 62,960. The silver-lead mining town of Broken Hill had a population of 27,054. The City of Blue Mountains, a vast area comprising mainly tourist centres, contained 21,316, and the City of Maitland, situated near both coal mining and rich rural areas, had 19,151 persons. Goulburn is the centre of a thriving farming district with some industrial development, and had a population of 15,991. Wagga Wagga with 15,340 and Lismore with 15,214 have outgrown Lithgow which showed a transitory war-time gain but in 1947 had only 14,461 inhabitants. Cessnock, a coal mining town, lost population over the last intercensal period, and with 13,029 was replaced in order by Albury with 14,412 and Orange with 13,780.

Apart from the centres in the County of Cumberland dependent upon the city, there were at the census of 1947, only fifteen country towns, including those already mentioned, with a population exceeding 10,000; thirteen between 5,000 and 10,000; and seventeen between 3,000 and 5,000.

The following table gives a comparison of the populations at the last six censuses of the cities and towns which had more than 3,000 inhabitants at the census of 1947. They are listed in the order of numerical importance at that date. Those municipalities contiguous to the Metropolis (as shown in Table 848) are omitted. Aborigines and shipping population are not included.

The populations as shown represent the number of persons living within the boundaries of the municipalities; in some of the towns the residential area extends beyond these boundaries and the total population of such towns is greater than the figure stated in the table.

Some relatively large urban areas not incorporated as municipalities but under shire administration are shown in Table 852. Many such are virtually suburbs of Sydney though not embraced within the metropolitan district as defined on page 1000. Others are associated with the industrial area of Newcastle and the northern coalfields. Port Kembla, Bulli, Corrimal and Thirroul have not been shown as they are embraced by the City of Greater Wollongong shown in Table 851. Only five of these towns owe their growth to rural development, viz., Griffith and Leeton in the Murrumbidgee Irrigation Area, Murwillumbah and Coff's Harbour on the North Coast, and Gosford, the centre of the State's principal citrus growing area.

TABLE 851.—Population of Principal Cities and Towns of N.S.W., 1891 to 1947.

Municipality.	Population at Census.					
	1891.	1901.	1911.	1921.	1933.	1947.
Sydney and Suburbs ...	383,333	481,830	629,503*	899,059	1,235,267*	1,484,004
Greater Newcastle ...	49,910	53,741	54,603	84,372	104,485	127,138†
Greater Wollongong ...	†	†	24,940	32,371	42,853	62,960
Broken Hill ...	19,789	27,500	30,972	26,337	26,925	27,054
Blue Mountains ...	†	†	11,825	17,997	14,713	21,316
Maitland ...	11,352§	11,361§	12,377§	13,068§	13,374§	19,151
Goulburn ...	10,916	10,612	10,023	12,715	14,849	15,991
Wagga Wagga ...	4,596	5,108	6,419	7,679	11,631	15,340
Lismore ...	2,925	4,378	7,381	8,700	11,762	15,214
Lithgow ...	3,865	5,268	8,196	13,275	13,444	14,461
Albury ...	5,447	5,821	6,309	7,751	10,543	14,412
Orange ...	5,064	6,331	6,721	7,398	9,634	13,780
Cessnock ¶	203	165	5,102	9,340	14,385	13,029
Tamworth ...	4,602	5,799	7,145	7,264	9,913	12,071
Grafton & Grafton Sth	4,445	5,147	5,888	6,077	8,551	12,025
Bathurst ...	9,162	9,223	8,575	9,440	10,413	11,871
Dubbo ...	3,551	3,409	4,452	5,032	8,344	9,545
Armidale ...	3,826	4,249	4,738	5,407	6,794	7,809
Parkes ...	2,449	3,181	2,935	3,941	5,846	6,897
Casino ...	1,486	1,926	3,420	3,455	5,287	6,698
Inverell ...	2,534	3,293	4,549	4,360	5,305	6,530
Kempsey ...	2,194	2,329	2,862	3,613	4,824	6,330
Forbes ...	3,011	4,294	4,436	4,376	5,355	5,949
Cowra ...	1,546	1,811	3,271	3,716	5,056	5,473
Glen Innes ...	2,532	2,918	4,089	4,974	5,352	5,453
Taree ...	716	871	1,205	1,765	4,581	5,423
St. Marys ...	1,823	1,840	1,794	1,952	2,811	5,370
Cootamundra ...	2,026	2,424	2,967	3,531	4,683	5,250
Queanbeyan ...	1,262	1,219	1,273	1,825	4,019	5,033
Penrith ...	3,099	3,539	3,682	3,604	3,911	4,961
Wellington ...	1,545	2,984	3,958	3,924	4,320	4,723
Young ...	2,746	2,755	3,139	3,283	4,011	4,656
Gunnedah ...	1,362	1,910	3,005	2,664	3,591	4,314
Narrandera ...	1,815	2,255	2,374	2,985	4,119	4,186
Temora ...	915	1,603	2,784	3,048	3,823	4,179
Mudgee ...	2,410	2,789	2,942	3,170	3,993	4,178
Junee ...	1,682	2,190	2,531	3,560	4,213	4,010
Singleton ...	2,595	2,872	2,996	3,270	3,668	3,940
Muswellbrook ...	1,298	1,710	1,861	2,152	3,287	3,939
Windsor ...	2,033	2,039	3,466	3,808	3,247	3,853
Campbelltown ...	2,381	2,152	1,825	2,345	2,835	3,725
Deniliquin ...	2,273	2,644	2,494	2,660	3,192	3,668
Bowral ...	2,258	1,752	1,751	2,620	3,005	3,660
Nowra ...	1,705	1,904	1,884	2,202	2,978	3,551
Richmond ...	1,242	1,202	1,857	2,008	2,343	3,410
Narrabri ...	1,977	2,286	2,514	2,358	2,911	3,329
Ingleburn **	217	362	379	545	1,881	3,270
Yass ...	1,770	2,220	2,136	2,502	2,866	3,254
Ballina ...	1,084	1,819	2,061	2,768	3,042	3,202
Shellharbour ...	1,587	1,929	1,512	1,527	1,877	3,117
Tenterfield ...	2,477	2,604	2,792	2,493	2,622	3,046

\* Area extended since previous census.

† Area slightly extended in 1938.

‡ Not available.

§ Municipalities of East Maitland, West Maitland and Morpeth only.

¶ Incorporated 1926 and

district enlarged.

|| Grafton South incorporated 1896.

\*\* Incorporated 1896.

TABLE 352.—Population, Towns and Localities Not Separately Incorporated, 1947.

Environs of Sydney.		Environs of Newcastle.		Provincial Towns.	
Name.	Approx. Population, 1947.*	Name.	Approx. Population, 1947.*	Name.	Approx. Population, 1947.*
Sutherland † ...	10,000	Kurri Kurri ...	5,800	Griffith ...	5,600
Hornsby † ...	8,000	Belmont ...	5,000	Murwillumbah	4,950
Cronulla † ...	8,000	Cardiff ...	5,000	Gosford ...	4,410
Waitara † ...	5,000	Swansea ...	3,600	Leeton ...	3,500
Miranda † ...	5,000	Weston ...	3,600	Coff's Harbour	3,100
Blacktown ...	5,000			Moss Vale ...	3,000
Dee Why † ...	5,000			Portland ...	3,000
Narrabeen † ...	4,000				
Westmead ...	4,000				

\* Populations only roughly approximate because boundaries between localities are ill-defined.

† Located within the shires shown as contiguous to the Metropolitan Area in Table 848.

The population of most of the larger towns has grown at a fairly uniform rate since 1891, and some towns have shown rapid increase in recent years.

Greater Newcastle, after twenty years of slow progress, has made rapid headway since 1911, largely on account of the growth of its manufacturing industries, as has the mining and industrial region of Greater Wollongong, but the population in the silver-lead mining town of Broken Hill has been virtually stable for about thirty years. Lithgow, a coal-mining and partly a manufacturing town, grew rapidly until 1927, when the ironworks were removed and there has been little further permanent progress; a large war-time accession having been practically dispersed by 1947. The newly-created City of Maitland, dependent to a great extent on coal mining, had a population of 19,151 in 1947, but owing to changes in boundaries since the previous census the extent of its development cannot be stated.

By 1921 Goulburn, after twenty years of stagnation, had developed into the leading town of the interior not dependent on mining, and still narrowly occupies that place.

Between 1921 and 1947 the municipalities which showed the greatest percentage increases were Ingleburn, 500; Taree, 207; Queanbeyan, 176; St. Marys, 175; Shellharbour, 104; and Wagga Wagga, 100. Queanbeyan is within about six miles of Canberra, and its growth is connected with the development of the Australian Capital. The population of the Australian Capital Territory, most of whom reside in Canberra, increased from 2,572 in 1921 to 16,905 in 1947. Grafton, Casino, Dubbo, Albury and Orange almost doubled in population between 1921 and 1947.

## SEX DISTRIBUTION.

The distribution of population in sexes in New South Wales throughout past years reflects the demographic forces which have gradually brought about equality in numbers. Although in early years there was a marked preponderance of males the stage has been reached at which females outnumber males.

The distribution of the sexes at each census from 1861 to 1947 was as follows:—

TABLE 853.—Sexes of Population, 1861 to 1947.

Census.	Distribution of Population in Sexes (excluding Aborigines).				Males per 100 Females.
	Number.		Proportion.		
	Males.	Females.	Males.	Females.	
			per cent.	per cent.	
1861	198,488	152,372	56.57	43.43	130
1871	274,842	228,156	54.64	45.36	121
1881	410,211	339,614	54.71	45.29	121
1891	609,666	517,471	54.09	45.91	118
1901	710,264	645,091	52.40	47.60	110
1911	857,698	789,036	52.08	47.92	109
1921	1,071,501	1,028,870	51.01	48.99	104
1933	1,318,471	1,282,376	50.69	49.31	103
1947	1,492,211	1,492,627	50.00	50.00	100

The great excess of males over females in the early years was due to several factors. The development of the colony was first stimulated by the "gold rushes" and later depended on the pastoral and mining industries. This, combined with remoteness from the Old World, led to far greater immigration of men than of women. In later years the predominance of males among immigrants tended to increase the disparity between the sexes. On the other hand, the higher rate of mortality among males renders the natural increase of females the greater, despite the excess of male over female births. As a consequence the excess of males diminished, and the diminution was hastened by the wars of 1914-1918, and 1939-1945 and the slender flow of immigrants since 1928.

The effects of these forces are seen clearly in the following table, which shows the excess of males in each quinquennial age group at each census from 1891 to 1947.

TABLE 854—Masculinity of Population at Various Ages, 1891 to 1947.

Age Group. (Years.)	Excess of Males.					Males per 100 Females.					
	1901.	1911.	1921.	1933.	1947.	1891.	1901.	1911.	1921.	1933.	1947.
0-4	1,755	3,140	3,718	4,757	6,188	103	102	103	103	104	104
5-9	2,243	2,017	3,144	3,759	3,512	102	103	102	103	103	103
10-14	1,485	1,188	2,732	3,255	3,448	102	102	102	103	103	103
15-19	(-) 313	1,966	1,774	2,913	4,720	100	100	102	102	102	104
20-24	(-) 2,370	4,464	(-) 5,420	3,561	1,173	108	96	105	94	103	101
25-29	230	4,040	3,794	5,094	(-) 2,031	128	100	106	96	105	98
30-34	5,899	4,332	4,058	1,903	(-) 1,994	142	112	107	105	102	98
35-39	10,742	4,413	3,851	(-) 5,467	2,254	148	126	109	105	94	102
40-44	11,494	7,485	4,510	1,867	5,074	142	134	117	107	102	105
45-49	9,337	9,055	3,996	5,025	189	145	139	124	108	106	100
50-54	6,288	9,381	6,648	4,586	(-) 5,002	154	133	131	116	107	94
55-59	4,258	6,639	6,843	1,549	424	155	128	132	120	103	101
60-64	4,541	3,671	5,283	1,054	(-) 1,822	163	137	122	119	103	97
65-69	3,768	2,356	3,603	1,659	(-) 3,959	142	141	118	120	105	92
70-74	2,570	2,026	1,013	1,145	(-) 5,164	137	149	124	168	105	85
75-79	734	1,416	268	83	(-) 3,798	149	126	127	104	101	83
80-84	309	496	35	(-) 412	(-) 2,085	147	120	122	101	93	82
85 and over	122	(-) 60	(-) 52	(-) 604	(-) 1,732	150	118	94	97	80	71
Not stated	2,072	687	418	368	189	...	...	...	...	...	...
Total	*65,164	68,662	42,631	36,095	(-) 416	118	110	109	104	103	100

\* Excludes half-caste aboriginals in a nomadic state who are included in Table 853.

(-) Denotes excess of females.

The censuses of 1861 to 1881 disclosed an excess of males at ages from the early twenties onwards. This was maintained by the greater net immigration of males than of females, especially in the period up to 1891. At the census of 1891 the excess was apparent from age 25, but more especially from age 30, and the higher ages reflected the cumulative effects of earlier migration. After 1891 migration had no appreciable effect on the population for twenty years, and when it again became prominent it was on a relatively lower scale than before. As a result the excess masculinity apparent in 1891 at ages 25 and over is noticeable at each succeeding census at progressively later ages, when the greater male mortality at higher ages also was asserting its influence. By 1921 the masculinity in each age group was assuming a more natural order. The excess of females at ages 20 to 29 in that year was the result mainly of the loss of men at the war and the excess of male deaths in the influenza epidemic of 1919, a further factor being the immigration of war brides. The effect of this disturbance was still apparent in the age group 30-44 years at the 1933 census, and in the group 45-59 years in 1947. A further loss of men in the war of 1939-45 resulted in an excess of females at each year of age from 25 to 35 in 1947. From 1921 also, there is increasing evidence of the effect of the higher male mortality after middle age, which, by 1947, had caused an excess of females at all ages from 48 years upwards, except at ages 57, 58 and 59 years, at which ages there was virtual equality of numbers.

The numerical increase in the excess of males at the earlier ages is due principally to an increase in the annual number of births. Births reached a peak in 1922, continued high until 1928, then declined and did not increase again until in the five years before the census of 1947. Births in those years in record numbers caused the excess of 6,188 males in the age group under five years.

The masculinity of the population reflects the average masculinity of births, which varies between 104 and 106 males per 100 females, and the higher death rate among male infants. At these early ages migration has little effect and a natural order is observable in ages under 20 throughout the whole period reviewed in the table.

# POPULATION.

1909

## AGES OF THE POPULATION.

As in many other countries, the average age of the population of New South Wales is increasing. Although variations in the age constitution have been due, in part, to immigration and the loss occasioned by wars and epidemics, the weightier factors in this State are the decreasing birth rate and an increase in the average duration of life.

The following table shows the number of persons in quinquennial age groups as recorded at each of the last two censuses, exclusive of full-blood aboriginals.

TABLE 855.—Ages of Population, 1933 and 1947.

Age Group. (Years.)	30th June, 1933.			30th June, 1947.			Increase, 1933-1947.
	Males.	Females.	Total.	Males.	Females.	Total.	Total.
0-4	117,281	112,524	229,805	149,627	143,439	293,066	63,261
5-9	127,800	124,041	251,841	119,400	115,888	235,288	(-) 16,553
10-14	126,664	123,409	250,073	108,465	105,017	213,482	(-) 36,591
15-19	123,438	120,525	243,963	120,089	115,369	235,458	(-) 8,505
20-24	116,312	112,751	229,063	123,695	122,522	246,217	17,154
25-29	105,279	100,185	205,464	118,166	120,197	238,363	32,899
30-34	93,247	91,344	184,591	116,942	118,936	235,878	51,287
35-39	87,139	92,606	179,745	111,100	108,846	219,946	40,201
40-44	91,077	89,210	180,287	97,488	92,414	189,902	9,615
45-49	85,401	80,376	165,777	88,422	88,233	176,655	10,878
50-54	69,000	64,414	133,414	79,166	84,168	163,334	29,920
55-59	50,674	49,125	99,799	78,811	78,387	157,198	57,399
60-64	42,643	41,589	84,232	63,854	65,676	129,530	45,298
65-69	33,452	31,793	65,245	45,706	49,665	95,371	30,126
70-74	23,996	22,851	46,847	28,828	33,992	62,820	15,973
75-79	13,351	13,268	26,619	18,307	22,105	40,412	13,793
80-84	5,511	5,923	11,434	9,209	11,294	20,503	9,069
85 and over	2,389	2,993	5,382	4,283	6,015	10,298	4,916
Not stated	3,817	3,449	7,266	10,653	10,464	21,117	13,851
Total	1,318,471	1,282,376	2,600,847	1,492,211	1,492,627	2,984,838	383,991

(-) Denotes decrease.

To eliminate a tendency to mis-statement at certain ages, and to distribute the unstated ages, the recorded figures need to be subjected to a process of graduation or smoothing. The resultant graduated number of persons at each age at the censuses of 1921 and 1933 is shown on pages 371 and 372 of the "Statistical Register" for 1935-36. Graduated numbers are not yet available for the census of 1947.

The sex distribution of the population at various ages is analysed in Table 854.

The changing age constitution of the population is illustrated in the following table, which shows the proportion of persons recorded in quinquennial age groups at each census since 1861.

TABLE 856.—Age Distribution of Population, 1861 to 1947.

Age Group. (Years.)	Proportion per cent. of Total Population.*								
	Census.								
	1861.	1871.	1881.	1891.	1901.	1911.	1921.	1933.	1947.
0-4	16.22	16.30	14.84	14.66	11.75	12.26	11.40	8.86	9.89
5-9	12.10	14.02	13.22	12.76	12.29	10.27	11.11	9.71	7.94
10-14	10.38	11.47	11.81	10.92	11.95	9.59	9.79	9.64	7.20
15-19	9.77	8.48	10.11	9.62	10.44	10.01	8.37	9.41	7.94
20-24	9.69	8.41	9.95	9.85	9.41	10.38	8.22	8.83	8.31
25-29	10.00	8.67	8.08	9.45	8.31	9.08	8.53	7.92	8.04
30-34	7.80	7.55	6.76	7.86	7.34	7.58	8.62	7.12	7.96
35-39	5.82	6.56	6.19	5.99	6.95	6.46	7.43	6.93	7.42
40-44	5.74	5.15	5.28	4.75	5.80	5.76	6.17	6.95	6.41
45-49	4.17	3.61	4.18	4.04	4.24	5.14	5.04	6.39	5.96
50-54	3.39	3.54	3.27	3.33	3.33	4.23	4.39	5.14	5.51
55-59	1.81	2.26	2.00	2.43	2.59	2.96	3.67	3.85	5.30
60-64	1.71	1.85	1.85	1.81	2.14	2.22	2.97	3.25	4.37
65-69	.64	.97	1.11	1.06	1.65	1.73	1.90	2.51	3.22
70-74	.43	.72	.74	.77	.96	1.17	1.20	1.81	2.12
75-79	.18	.25	.35	.42	.48	.73	.72	1.03	1.36
80-84	} .15	.19	.26	{ .19 .09	.26	.30	.32	.44	.69
85 and over					.11	.13	.15	.21	.36
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Under 15	38.70	41.79	39.87	38.34	35.99	32.12	32.30	28.21	25.03
15-64	59.90	56.08	57.67	59.13	60.55	63.82	63.41	65.79	67.23
65 and over	1.40	2.13	2.46	2.53	3.46	4.06	4.29	6.00	7.74
21 and over	†	48.06	48.02	49.93	51.62	55.77	57.57	60.55	65.42

\* 1861-1911 calculated from total population including aboriginals; 1921-1947 excluding aboriginals.

† Not available.

The age constitution of the population in 1861 was rendered abnormal by the large influx of persons in early manhood during the gold rushes of the preceding decade and by the large number of births in the preceding quinquennium, but, thereafter, as the result of a more steady growth of the population, it became more uniform. The birth rate commenced to decline steadily in 1864, and although the effect of this influence is partly obscured by the effects of migration and reduced mortality, its extent is indicated broadly by the decline in the proportion of children at ages under 10 years at each succeeding census. The decline in the birth rate resulted



in an actual loss of numbers in the age group 0-4 years in 1933 as compared with 1921, but the recovery, due to war-time influences, in the number of births for some years prior to the 1947 census, caused the number in this age group to be 63,261 greater in 1947 than in 1933.

During the period of seventy-six years from 1871 to 1947, the proportion of children under 15 years of age to the total population fell from 41.8 per cent. to 25.0 per cent., and the proportion of aged persons over 64 years of age and of persons at what may be called the productive ages (15 to 64 years) increased considerably. The proportion of persons of dependent age, viz., those under 15 and over 64 years, decreased from 43.92 per cent. in 1871 to 32.77 per cent. in 1947, but the component age groups show opposing trends and the proportion of persons 65 years of age and over, actually increased more than five-fold in the period covered by Table 856.

The proportion of adults in the population has grown very steadily since 1881.

#### CONJUGAL CONDITION OF THE POPULATION.

The proportion of married persons in New South Wales at the census of 1947 was 46.6 per cent., as compared with 39.6 per cent. in 1933 and 37.4 per cent. in 1921. The population (exclusive of aborigines) at the census of 1947, arranged according to conjugal condition, was as follows:—

TABLE 857.—Conjugal Condition of Population, 30th June, 1947.

Conjugal Condition.	Number.			Proportion.		
	Males.	Females.	Total.	Males.	Females.	Total.
				per cent.	per cent.	per cent.
Never married—						
Under age 15 ...	377,492	364,344	741,836	25.38	24.47	24.93
Age 15 and over ...	364,588	293,007	657,595	24.51	19.68	22.09
Married ...	691,343	695,466	1,386,809	46.47	46.72	46.60
Widowed ...	43,029	122,909	165,938	2.89	8.26	5.58
Divorced ...	11,154	12,914	24,068	0.75	0.87	0.80
Not stated ...	4,605	3,987	8,592	...	...	...
Total ...	1,492,211	1,492,627	2,984,838	100.00	100.00	100.00

Persons never married constituted 47.02 per cent. of the total population, but of these 741,836 (or 24.93 per cent. of the population) were under the age of 15 years. The males over the age of 15 years who had never been married numbered 364,588, and females 293,007. The proportion of married persons to those over the age of 15 years rose from 49.2 per cent. in 1911 to 55.1 per cent. in 1921, declined to 54.9 per cent. in 1933, but at 61.8 per cent. in 1947 was much greater than ever before.

The proportion of males and females in each group as recorded at each census from 1861 to 1947 is shown below:—

TABLE 858.—Proportionate Conjugal Condition of Population,  
1861 to 1947.

Census.	Males.				Females.			
	Never Married.	Married.	Widowed.	Divorced.	Never Married.	Married.	Widowed.	Divorced.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1861	69·34	28·23	2·43	*	61·09	35·14	3·77	*
1871	69·96	27·59	2·45	*	62·89	32·82	4·29	*
1881	70·64	26·94	2·42	*	63·52	31·75	4·73	*
1891	69·78	27·41	2·78	·03	62·87	32·11	5·00	·02
1901	68·46	28·69	2·75	·10	62·43	32·00	5·46	·11
1911	65·00	32·18	2·67	·15	59·30	35·03	5·52	·15
1921	60·51	36·68	2·60	·21	55·70	38·16	5·91	·23
1933	57·73	39·03	2·85	·39	52·49	40·16	6·89	·46
1947	49·89	46·47	2·89	·75	44·15	46·72	8·26	·87

\* Divorce proceedings were first permitted under Matrimonial Causes Act, 1873.

There has been a steady decline since 1881 in the proportion of males and females never married, and a corresponding increase in the proportion married. This has been due in a large measure to the altered age constitution of the population consequent on the declining birth rate. The proportion of widowers has shown no appreciable increase during the period, although the proportion of widows has increased continuously, attaining the high proportion of over 8 per cent. of the total female population in 1947. The increase in the proportion of divorced persons of both sexes has been relatively very rapid. The number and proportion of widowed and divorced persons are exclusive of those re-married.

#### BIRTHPLACES OF THE POPULATION.

Broadly, nationality is determined in New South Wales by the common law principle of locality of birth, although it is provided also that, irrespective of place of birth, any child whose father was a British subject, or a child born on a British vessel, shall be deemed a British subject.

The nationality of the population of the State at the census of 1947 was preponderantly British, no less than 99·5 per cent. of the inhabitants being of British allegiance. The proportion born in Australia was 89·8 per cent.

#### ABORIGINALS.

The number of aboriginals in New South Wales during the first century after the date of settlement is not known accurately, but it is certain that they were never numerous.

At the censuses of 1871 and 1881 aborigines living in a wild or semi-wild state were not enumerated. The first careful enumeration was made in 1891, when it was found that there were only 5,097 aborigines of full blood. Since then their number has declined progressively. The number of aborigines of full-blood enumerated at censuses since 1871 was as follows:—

TABLE 859.—Aborigines (Full Blood) 1871 to 1933.

Census.	Males.	Females.	Total.	Census.	Males.	Females.	Total.
1871 ... ..	709	274	983*	1911 ... ..	1,152	860	2,012
1881 ... ..	938	705	1,643*	1921 ... ..	923	674	1,597
1891 ... ..	2,896	2,201	5,097	1933 ... ..	617	417	1,034
1901 ... ..	2,192	1,586	3,778				

\* Excluding aborigines in wild or semi-wild state.

The numbers of half-castes enumerated at successive censuses were as follow:—In 1891, 3,183; in 1901, 8,147; in 1911, 4,512; and in 1921, 4,588, of whom 2,367 were males and 2,221 females. There were 8,309 enumerated at the census of 1933, of whom 4,358 were males and 3,951 females.

Since 1924 endeavour has been made to obtain an annual census of aborigines with the assistance of the Aborigines' Welfare Board and the police. Owing to the difficulty of tracing individuals, it is considered that these enumerations are not precise, but the figures may be regarded as reliable estimates. The number recorded at the annual collection of 30th June, 1933 was 195 greater than at the census enumeration of the whole population. At 30th June, 1941 the number of aborigines of full blood recorded in this way was 594, of whom 375 were males and 219 females. Of the total 40 were nomadic, 112 were in regular employment, and there were 442 others. The number living in supervised camps was 314, excluding any who were in regular employment.

Half-castes recorded at the annual collection of 30th June, 1941 numbered 10,022 of whom 5,361 were males and 4,661 females. However, it is probable that this is a considerable overstatement through the inclusion of full-bloods, and possibly of quadroons and persons of lesser caste.

Of the half-castes recorded in 1941, 505 were nomadic, 2,057 were in regular employment, and there were 7,460 others. The number living in supervised camps was 3,403.

Owing to difficulties in collecting data the annual census of aborigines has been suspended since 1941.

#### POPULATION OF AUSTRALIAN STATES.

The following table shows the population and the proportion of population of each State of the Commonwealth at the last three censuses. Aborigines of full blood are excluded.

During the intercensal period 1933 to 1947, the population of New South Wales increased at an average annual rate of 0.99 per cent., which was faster than that of any other State of the Commonwealth, excepting Queensland, where the rate was 1.11 per cent. In order, rates in other

States were:—Western Australia, 0.98 per cent.; Tasmania, 0.88 per cent.; Victoria, 0.87 per cent.; and South Australia, 0.76 per cent. The average for the whole of Australia was 0.96 per cent.

TABLE 860.—Population of Australian States and Territories, 1921, 1933, and 1947.

State or Territory.	Population.			Proportion in each State or Territory.		
	Census, 1921.	Census, 1933.	Census, 1947.	Census, 1921.	Census, 1933.	Census, 1947.
				per cent.	per cent.	per cent.
New South Wales ...	2,100,371	2,600,847	2,984,838	38.67	39.23	39.38.
Victoria ...	1,531,280	1,820,261	2,054,701	28.19	27.46	27.11
Queensland ...	755,972	947,534	1,106,415	13.92	14.29	14.60
South Australia ...	495,160	580,949	646,073	9.13	8.76	8.53
Western Australia ...	332,732	438,852	502,480	6.06	6.62	6.63
Tasmania ...	213,780	227,599	257,078	3.91	3.43	3.39
Northern Territory ...	3,867	4,850	10,868	0.07	0.07	0.14
Australian Capital Ter.	2,572	8,947	16,905	0.05	0.14	0.22
Commonwealth ...	5,435,734	6,629,839	7,579,358	100.00	100.00	100.00

#### POPULATION OF THE WORLD.

The ratio of the population of New South Wales to that of the rest of the world may be gauged by reference to the following table, derived from the Statistical Year Book of the League of Nations, 1942-44. Although based on the latest information available, comparisons should not be drawn between totals for continents (and some countries) published from year to year as the figures in some instances are mere approximations founded on estimates for which little data exist. Apart from such cases, the populations stated are estimates founded on the latest available census figures. The data relate to the year 1939 and therefore do not take account of the political changes which have occurred since then. Complete post-war population estimates related to present day political areas are not available from authoritative sources.

TABLE S61.—Population of World.

Region or Country.	Area in Square Miles (as at 31st December, 1939).	Estimated Population at 31st December, 1939.	Proportionate Distribution.		Number of Persons per Square Mile.
			Area.	Population.	
	000	000	per cent.	per cent.	
<b>Continental Divisions—</b>					
Europe* ... ..	2,079	402,000	4.1	18.5	193.4
Asia* ... ..	10,348	1,154,000	20.2	53.2	111.5
U.S.S.R.† in Europe and Asia	8,176	172,000	15.9	7.9	21.0
Africa ... ..	11,699	158,000	22.8	7.3	13.5
North and Central America...	8,742	184,878	17.0	8.5	21.1
South America ... ..	6,938	88,500	13.6	4.1	12.8
Australasia and Oceania ...	3,301	10,800	6.4	.5	3.3
<b>World Total‡</b> ...	<b>51,283</b>	<b>2,170,178</b>	<b>100.0</b>	<b>100.0</b>	<b>42.3</b>
<b>Countries (including Dependencies)§—</b>					
<b>British Commonwealth of Nations</b> ... ..	<b>11,456</b>	<b>537,163</b>	<b>22.3</b>	<b>24.8</b>	<b>46.9</b>
China¶ ... ..	4,287	450,000	8.4	20.7	105.0
U.S.S.R.† ... ..	8,176	172,000	15.9	7.9	21.0
United States of America ...	3,739	150,183	7.3	6.9	40.2
France... ..	4,623	105,771	9.0	4.9	22.9
Japan ... ..	262	104,120	.5	4.8	397.4
Netherlands ... ..	809	78,553	1.6	3.6	97.1
Germany   ... ..	226	79,855	.4	3.7	353.3
Italy ... ..	1,466	52,466	2.9	2.4	35.8
Brazil ... ..	3,286	40,700	6.4	1.9	12.4
Other Countries ... ..	12,953	399,367	25.3	18.4	30.8
<b>World Total‡</b> ...	<b>51,283</b>	<b>2,170,178</b>	<b>100.0</b>	<b>100.0</b>	<b>42.3</b>

\* Excluding U.S.S.R. † Union of Soviet Socialist Republics (Russia).

‡ Excluding Arctic and Antarctic Regions. § Excluding Mandated Territories.

¶ Including Manchukuo. || Including the Saar Territory, Austria, Sudetenland and Memel.

## MIGRATION.

A large movement of population takes place each year between New South Wales and other Australian States, but is due more to the movement of tourists, business men, and persons following itinerant callings, than to immigration or emigration of a permanent nature.

Although a similar qualification applies to oversea movements, migration experience is governed by several factors and of these the principal is the arrival of migrants assisted by the States and of other permanent settlers who are attracted in large numbers in times of economic stability.

The interstate and overseas movement of people to and from New South Wales is shown in the following table. Figures for war years relate to civilian movement only and include evacuees:—

TABLE 862.—Interstate and Oversea Migration, 1936 to 1946.

Year.	Arrivals in New South Wales.			Departures from New South Wales.			Excess of Arrivals over Departures. (Net Immigration.)		
	Inter-state. *	From Oversea Countries Direct.	Total.	Inter-state. *	To Oversea Countries Direct.	Total.	Inter-state. *	Oversea Countries Direct.	Total.
1936	148,470	38,619	187,088	146,496	38,349	184,845	1,983	270	2,253
1937	151,586	45,203	196,789	146,812	43,237	190,049	4,774	1,966	6,740
1938	155,606	50,040	205,646	155,231	46,672	201,903	375	3,368	3,743
1939	142,400	49,119	191,519	142,206	43,407	185,613	194	5,712	5,906
1940	115,607	27,320	142,927	125,747	20,217	145,964	(-) 10,140	7,103	(-) 3,037
1941	118,269	16,942	135,211	126,429	14,188	140,617	(-) 8,160	2,754	(-) 5,406
1942	136,642	4,689	141,331	126,859	3,994	130,853	9,783	695	10,478
1943	133,774	2,720	136,494	131,270	2,609	133,978	2,495	21	2,516
1944	164,089	4,622	168,711	146,617	5,404	152,021	17,472	(-) 782	16,690
1945	200,452	10,020	210,472	193,185	10,489	203,674	7,267	(-) 460	6,798
1946	263,511	22,501	286,012	258,733	31,767	290,500	4,778	(-) 9,266	(-) 4,488

\* Including movement of population to and from overseas countries via other States.

(-) Denotes excess of departures.

Arrivals from and departures to "overseas countries direct" as shown above represent complete records of persons arriving or departing overseas direct. They include persons permanently transferring their residences as well as casual movements of Australians and of overseas visitors. The numbers are dissected into these categories in Table 863.

The records of interstate movement of population which are used for the purposes of migration statistics are restricted to the minimum required to determine the net migration and therefore do not represent the total numbers arriving or departing. Records for sea and air traffic do not distinguish those who hold return tickets and therefore they are included. Since 1st July, 1926, the movement by rail has been represented by single interstate rail tickets, disregarding return tickets.

Road movements, though considerable, are not recorded but probably do not affect the annual net migration materially.

Fluctuations in net migration generally, are due largely to the influence of economic conditions. The onset of depression in 1929 was marked by a heavy diminution in net immigration followed in 1930 and 1931 by substantial net emigration. With a recovery in economic conditions in the subsequent years, the State showed small annual gains of population by migration until war commenced.

Table 862, showing figures compiled on the basis described, illustrates the restrictive effect of war-time conditions on the movement of civilian population in recent years. The years 1945 and 1946 were affected in considerable degree by post-war readjustments.

*Oversea Migration.*

The aggregate overseas movement of population shown in the last table may be analysed to distinguish between persons migrating for permanent settlement, Australians travelling abroad, and visitors from other countries.

Particulars of intention in regard to residence of persons arriving and departing overseas have been collected since 1st July, 1924. The classification is made according to intention declared upon embarkation or disembarkation and as intentions in some cases are changed subsequently, the figures do not show the actual movements precisely. In the classification, "permanent residence" denotes residence for one year or more. The following summary shows the number in the various categories in the years 1943 to 1946, comparing the totals for New South Wales with those for all Australia.

TABLE 863.—Migrants—New South Wales and Commonwealth, 1943 to 1946.

Arrivals and Departures Oversea Direct.	1943.		1944.		1945.		1946.	
	New South Wales.	Common- wealth.	New South Wales.	Common- wealth.	New South Wales.	Common- wealth.	New South Wales.	Common- wealth.
<b>Arrivals—</b>								
Permanent Arrivals ...	958	1,758	1,492	2,460	4,557	7,143	9,561	18,217
Australians returning ...	755	963	1,431	2,025	2,654	3,760	4,830	6,330
Visitors ...	1,007	1,646	1,699	2,961	2,805	4,104	8,110	10,343
Evacuees* ...	...	1,758	...	51	4	369	...	...
Total arrivals...	2,720	6,125	4,622	7,497	10,020	15,376	22,501	34,890
<b>Departures—</b>								
Australian residents departing permanently† ...	1,156	1,929	1,801	4,272	5,479	10,785	19,210	29,806
Australians who intend to return ...	468	676	1,937	2,605	1,828	2,788	4,699	6,702
Visitors ...	1,075	2,249	1,667	2,803	3,182	4,432	7,858	13,530
Total departures...	2,699	4,854	5,405	9,680	10,489	18,005	31,767	50,038

\*These totalled 3,080 in New South Wales and 12,586 in Australia in the years 1941–45.

†Includes repatriating evacuees.

The New South Wales figures relate to persons leaving overseas ships at New South Wales ports, irrespective of the ultimate State of destination, and persons from other States joining overseas ships at New South Wales ports. The majority of travellers between Australia and other countries (particularly visitors from abroad) embark or disembark at ports in New South Wales (principally Sydney).

*Nationality of Oversea Migrants.*

The following table shows the nationalities of persons who arrived in or departed from Australia via the ports of New South Wales in the last three years:—

TABLE 864.—Nationality of Oversea Migrants, 1944 to 1946.

Racial Origin or Nationality.	1944.			1945.			1946.		
	Arri- vals.	Depar- tures.	Excess of Arri- vals.	Arri- vals.	Depar- tures.	Excess of Arri- vals.	Arri- vals.	Depar- tures.	Excess of Arri- vals.
British ... ..	3,834	4,657	(-) 823	8,823	9,529	(-) 706	17,538	24,956	(-) 7,418
French ... ..	318	242	76	320	331	(-) 11	492	545	(-) 53
German ... ..	10	12	(-) 2	29	37	(-) 8	235	192	43
Greek ... ..	3	3	...	5	8	(-) 3	95	27	68
Italian ... ..	1	1	...	11	36	(-) 25	20	76	(-) 56
Russian ... ..	12	13	(-) 1	16	14	2	129	132	(-) 3
United States of America ...	189	241	(-) 52	235	214	21	1,594	2,222	(-) 628
Yugoslav ... ..	...	1	(-) 1	3	1	2	22	32	(-) 10
Other European ... ..	123	110	13	425	219	206	1,408	2,506	(-) 1,098
Total, European ... ..	4,490	5,280	(-) 790	9,867	10,389	(-) 522	21,533	30,688	(-) 9,155
Chinese ... ..	11	41	(-) 30	60	27	33	378	533	(-) 155
Indian ... ..	93	41	52	34	38	(-) 4	428	404	24
Japanese ... ..	...	...	...	1	...	1	1	5	(-) 4
Syrian ... ..	...	...	...	1	...	1	18	9	9
Other Asiatic ... ..	20	13	7	33	13	20	115	106	9
Polynesian, Melanesian, etc.	7	24	(-) 17	14	17	(-) 3	20	12	8
Other Non-European ... ..	1	6	(-) 5	10	3	7	8	10	(-) 2
Total, Non-European ... ..	132	125	7	153	100	53	968	1,079	(-) 111
Grand Total ... ..	4,622	5,405	(-) 783	10,020	10,489	(-) 469	22,501	31,767	(-) 9,266

(-) Denotes excess of departures.

The numbers in the table include visitors from overseas and Australian residents travelling abroad.

To better indicate the effect of migration upon the racial composition of the population, the above figures have been analysed according to intention as to residence expressed at the time of arrival or departure, and the net "permanent" movement of persons of certain nationalities since 1938 is shown in the following table. The figures represent the balance between those departing permanently and those who arrive intending to reside for one year or longer.

TABLE 865.—Net "Permanent" Oversea Migration by Nationality, 1938 to 1946.

Racial Origin or Nationality.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.
British ... ..	(-) 762	(-) 435	2,302	1,704	(-) 244	(-) 303	(-) 308	(-) 1,160	(-) 7,779
German ... ..	1,211	2,706	119	(-) 11	...	(-) 1	1	(-) 8	49
Greek ... ..	259	288	68	8	...	1	3	(-) 3	70
Italian ... ..	626	544	150	(-) 1	3	...	1	28	(-) 37
Yugoslav ... ..	158	114	41	(-) 1	...	...	...	2	(-) 7
United States of America ...	93	57	40	86	(-) 24	(-) 1	(-) 30	40	(-) 813
Other European ... ..	617	1,216	407	222	42	99	20	184	(-) 937
Total European ... ..	2,202	4,400	3,199	2,007	(-) 223	(-) 205	(-) 307	(-) 973	(-) 9,454
Chinese ... ..	235	73	(-) 78	74	28	11	(-) 18	29	(-) 248
Natives of India, Ceylon ...	20	5	19	8	...	(-) 7	12	10	12
Japanese ... ..	1	(-) 12	(-) 38	(-) 203	...	...	...	(-) 4	4
Syrian ... ..	50	43	(-) 1	...	...	3	...	1	7
Other Asiatic ... ..	17	35	1	12	4	1	5	5	40
Other Non-European ... ..	13	5	9	7	5	(-) 1	(-) 1	6	(-) 2
Total Non-European ... ..	336	149	(-) 88	(-) 102	37	7	(-) 2	51	(-) 195
Grand Total ... ..	2,538	4,639	3,111	1,905	(-) 186	(-) 198	(-) 309	(-) 922	(-) 9,649

(-) Denotes excess of departures.



*Immigration Restriction.*

At Common Law aliens have no legal right of admission to any British country, and migration to and from New South Wales is regulated principally by statutes of the Federal Parliament, *e.g.*, the Immigration Act, 1901-1940, and the Contract Immigrants Act, 1905.

Any person may be refused admission to Australia who fails to write from dictation by an officer not less than fifty words in any prescribed European language; any person who has not the prescribed certificate of health; any feeble-minded person; any person suffering from serious transmissible disease or defect, tuberculosis or certain other serious diseases; any person convicted of crime in certain circumstances; any prostitute or person living by prostitution; any advocate of revolution, assassination, or the unlawful destruction of property; or any person 16 years of age or over not possessed of a passport as prescribed. Should such persons gain admission, they may be deported. As a general rule persons formerly domiciled in the State cannot be excluded from return after temporary absence.

*Registration of Aliens.*

Regulations under the immigration laws of the Commonwealth provide machinery for checking and regulating the entry of aliens and for collecting comprehensive personal records upon entry into the Commonwealth, but until recently, except in war-time, there were no provisions for recording their movements within the Commonwealth.

The Aliens Act, 1947 (Commonwealth) which came into operation on 1st January, 1948, provides for a Register of Aliens in each State or Territory of the Commonwealth, and all aliens over the age of 16 years must register unless exempted under the provisions of the Act.

This Act repeals the Aliens Registration Act, 1939, and supersedes the Alien Control Regulations under the National Security Act.

It provides that change of address or occupation must be notified to the responsible officer within seven days.

Upon registration, an alien receives a certificate of registration which he must produce upon demand by a competent authority and surrender before leaving the Commonwealth.

*Assisted Migration.*

Particulars of the history of assisted migration will be found in earlier issues of the Year Book.

Assisted immigration throughout the years has been intermittent. The degree of assistance afforded, types of persons to be admitted, method of choosing them and countries whence they came, as matters of Government policy, have been dependent to a very large extent upon local conditions.

After the war of 1914-18, Governments of the State, the Commonwealth and the United Kingdom co-operated in migration policy. Information relating to schemes in operation from 1919 to 1932 and from 1937 to 1939, the number of arrivals since 1832, and other particulars of assisted immigrants were published in the 1940-41 issue of the Year Book. Assisted migration was suspended upon the outbreak of war in September, 1939, and the last assisted immigrant under the 1937-39 scheme arrived in New South Wales early in 1941.

In March, 1945, an agreement was made between the Commonwealth and United Kingdom Governments for a scheme of free and assisted passages for British residents desirous of migrating to Australia, with provisions similar to those of the earlier schemes. The Commonwealth Government is to undertake recruitment, selection, medical examination and transportation, and the States will be responsible for reception, accommodation on arrival and after-care of migrants. Provision is made for individual and group nominations, and in connection with the latter, for the co-operation of auxiliary voluntary migration organisations. The scheme commenced in April, 1947, and is to operate only while conditions for settlement are favourable.

The United Kingdom Government will provide *free* passages for British ex-servicemen and women and persons with war-time service in the Merchant Navy, and, under its Empire Settlement Acts, will *assist* migration of other suitable British subjects normally resident in the United Kingdom. These latter, male or female, are to contribute £10 if of or above the age of 19 years and £5 if between the ages of 14 and 19 years toward the cost of passage. The remainder of the cost of passage of these, and the cost of free transport of children is to be shared equally by the two Governments.

The maintenance of British child migrants brought to Australia under the auspices of voluntary migration organisations is the subject of agreement between the Commonwealth and State Governments. The States are to pay 3s. 6d. per week for each child up to the age of 14 years (or 16 years if the child remains at school) subject to the concurrent payments of Commonwealth child endowment of 7s. 6d. per week and of the United Kingdom Government's contribution of 5s. sterling (6s. 3d. Australian currency) per week.

The legal guardianship of British evacuee children still in Australia, and of migrant children brought to Australia otherwise than with, or who live under the care of their parents or relatives, is vested under the Immigration (Guardianship of Children) Act, 1946, in the Minister for Immigration. He may delegate his powers of guardianship to State authorities. Generally, those who sponsor the admission of such children are granted the custody of them.

The Commonwealth Government has arranged to grant assisted passages to British Empire and United States ex-servicemen and to persons of European countries, but aliens are to be admitted only in numbers and of classes as can be readily assimilated.

In an agreement with the International Refugee Organisation, a subsidiary of the United Nations Organisation, signed at Geneva on 21st July, 1947, Australia has undertaken to admit an annual quota of 12,000 displaced persons, to be selected by the Commonwealth, for each of which it will contribute £10 toward the cost of passage. The Commonwealth has agreed to increase the quota to 20,000 a year if the Organisation can provide the necessary ships. The first party of displaced persons arrived in November, 1947. These migrants spend the first month after arrival in reception and training centres to acquire a knowledge of the Australian way of life and to be prepared for their successful placement in the community.

## NATURALISATION.

Under certain conditions a person of foreign allegiance may be granted a certificate of naturalisation, which entitles him to all the political and other rights, powers and privileges, and subjects him to all obligations to which natural-born British subjects are entitled or subject in the Commonwealth of Australia, except in so far as special distinction is made by law between the prerogatives of natural born and naturalised British subjects. The issue of these certificates is a function of the Commonwealth. Certificates of naturalisation issued under former State laws remain in force under the Federal statute, the Nationality Act, 1920-1946.

Nationality Acts passed in 1946 provide that a woman who at the time of her marriage to an alien was or is a British subject resident in Australia or the Territory of New Guinea shall, unless she otherwise elects, be or continue to be a British subject.

On account of the small non-British element in the population of New South Wales the number of naturalisations generally has not been large, but, in recent years, the relatively higher proportion of alien migrants who settled permanently has caused a proportionate increase in the number of naturalisations. In the 71 years, 1849 to 1919, there were 17,426 persons naturalised but in the 27 years 1920 to 1946 there were 15,201. There were 281 naturalised in 1943, 1,227 in 1944, 1,651 in 1945 and 2,193 in 1946. The following table shows the birthplaces of the persons naturalised in New South Wales since 1920:—

TABLE 866.—Birthplaces of Persons Naturalised, 1920 to 1946.

Birthplace.	Number.	Birthplace.	Number.	Birthplace.	Number.
Italy ...	3,771	Czechoslovakia	324	Lithuania ...	69
Greece ...	2,124	Norway ...	295	Belgium ...	67
Germany ...	1,845	Hungary ...	292	Turkey ...	54
Austria ...	801	France ...	283	Bulgaria ...	32
Russia ...	762	Finland ...	251	Portugal ...	10
Poland ...	720	United States	244	Servia ...	6
Yugoslavia ...	477	Switzerland ...	239		
Estonia...	389	Holland ...	187	Other ...	632
Syria ...	355	Latvia ...	104		
Denmark ...	354	Roumania ...	99	Total ...	15,201
Sweden ...	338	Spain ...	77		

Figures showing birthplaces of persons naturalised each year are published in the Statistical Register.

## PASSPORTS.

The Passports Act, 1938 of the Commonwealth, which came into operation on 1st July, 1939, replaced an Act of 1920. It is uniform with similar legislation in other British countries. Under its provisions it is not compulsory for persons leaving Australia to be possessed of a valid passport. But in practice a passport is usually needed because it must be produced for entry into most British and foreign countries. Moreover it is prescribed by the Immigration Act, 1901-1940, that all persons over 16:

years of age who desire to enter Australia must be in possession of a valid passport in addition to landing permit or other necessary authority even return after temporary absence.

The fee for a Commonwealth passport is £1, and as a general rule it is endorsed as valid for five years from the date of issue. It may be renewed for any consecutive period from one to five years provided the total period does not exceed ten years; then a fresh passport must be obtained. A fee of 2s. is charged for each year of renewal.

British visas are added to the passports of aliens, the fees being 8s. for an ordinary visa and 2s. for a transit visa.

British subjects travelling to foreign countries must have their passports endorsed for travel to those countries, bearing, where required, the visa of the respective consular representatives. The necessity for consular visas has been dispensed with in respect of travel to some foreign countries.

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